


4th edition

ACCOUNTING

Concepts & Applications

Phillipa Greig
Joan Mackay
Stacey Beaumont
Rosette Sagner



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Exercises

Accounting Concepts and Applications: introductory theory and practice (4th edition) provides a sound basis for students to learn the essential introductory theory of double-entry accounting and to put it into practice through a range of graded exercises. It has been written by practising accounting teachers and accountants who have both classroom and industry experience.

The user-friendly page layout and language level will help students to gain a comprehensive understanding of the theoretical concepts and practical applications of accounting in both manual and computerised systems. The logical progression of topics follows the Queensland Studies Authority (QSA) Accounting Senior Syllabus 2003 (amended 2006). This provides an excellent structural framework for teachers of Years 11 and 12, or for introductory accounting courses in a post-secondary setting.

The ***Accounting Concepts and Applications Solutions and Teacher Resources*** (4th edition) CD-ROM supports the textbook and provides answers to all the theoretical and practical questions in the student text. The teacher resources include ready-to-use overheads, handouts, summaries, review sheets and additional exercises. Standard accounting proformas are provided (free of copyright) so that teachers can provide their students with extra assistance when completing practical and theoretical tasks. This enables more efficient and effective use of class time.

How to use this book

Each chapter begins with the ANU strategy: 'Already know, Need to know, Using this knowledge'. This strategy highlights the developmental nature of the subject and enables students to connect the knowledge from previous chapters with new concepts introduced.

Objectives of accounting are highlighted for each new part in a chapter to clearly link the areas of study with the fundamental accounting functions

Learning objectives based on the requirements of the QSA syllabus are provided at the beginning of each chapter. They are also referred to throughout the text when the relevant subject matter is first introduced.

Understandings, directly from the areas of study in the syllabus, are provided at the conclusion of each chapter. They form a summary of the content that has been covered in the chapter.

Accounting vocabulary is highlighted at the beginning of each chapter to familiarise students with the terminology that will be encountered in the topic. These terms are fully explained in clear definitions that appear with a **symbol**, then consolidated at the end of the text in a comprehensive glossary – a useful reference for revision.





Other learning supports include worked examples using both T and columnar ledger styles, tabular presentation of information, helpful hints, and clear steps outlining accounting procedures. Techniques requiring several stages or steps are summarised and displayed with a **step symbol**. Each new stage has a step symbol to indicate where students are up to.



Language education features prominently throughout exercises in each chapter. Chapter 9 is entirely devoted to language education, outlining a developmental approach to assist students in practising their writing skills. Many genres are modelled, including memorandums, letters and reports. Clear guidelines for the development of non-written presentations and strategies for planning are also provided. A **symbol** next to exercises indicates where techniques demonstrated in the language chapter can be put into practice.

The **Common Curriculum Elements** (appropriate to accounting) that form the basis for the Queensland Core Skills Test (Year 12) are incorporated in exercise tasks. These terms are clearly explained in the language chapter.

Computer applications are applied where appropriate. Chapter 15 guides students through using an accounting package. Illustrations of spreadsheet activities provide clear reference points to help students perform computerised applications within an accounting context.

References to **accounting standards** are included to familiarise students with their applicability to the accounting profession in Australia.

Margin notes provide commentary or special notes on the concepts and applications at relevant points, as well as cross-references to other parts of the text.



Review and practice questions are located throughout the text to allow students to consolidate their newly acquired knowledge. **Exercises** are cross-referenced in the text and provided at the end of each chapter in a distinctive coloured section. The exercises are graded with **stars** – one star means least difficult, and three stars indicate the most challenging exercises. All text exercises, as well as additional exercises, are available on the student CD-ROM, enabling students to print questions as required.

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The background of the slide features a close-up, shallow depth-of-field photograph of several blue calculators. The calculators are arranged diagonally across the frame, with one in sharp focus in the center and others blurred in the foreground and background. The lighting is soft, highlighting the texture of the calculators.

Area of study:

Foundation studies

FS1 Introduction to accounting

FS2 Financial reports

Chapter

FS1

Introduction to accounting

Accounting – the discipline and the profession

- The discipline
- The profession
- Accounting standards
- Ethical conduct
- Opportunities for accounting graduates
- Factors impacting on accounting

Accounting entity assumption and sole trader businesses

- Accounting assumptions
- Sole trader
- Accounting entity assumption
- Legal entity
- Unlimited liability versus limited liability
- Establishing a sole trader business
- Service and trading businesses

The accounting equation

- Accounts and types of accounts
- The accounting equation
- Twofold nature of business transactions
- Effects of transactions on the accounting equation (excluding GST)
- Rules of debit and credit
- Transaction analysis table
- Revenues and expenses

Chapter 1

Analysing, journalising and posting transactions

- Accounting process
- Function and importance of source documents
- From transactional analysis to general journal
- Preparation of the general journal
- From journals to the general ledger
- Preparation of the trial balance

Transactions with GST, general ledger and trial balance

- Goods and services tax
- Applying GST to a wide variety of transactions
- Correction of errors
- Opening entry for a beginning business versus a continuing business
- Payment of GST to the Australian Taxation Office
- Concluding summary of transactions

Part 1 – Accounting – the discipline and the profession

Already know	<ul style="list-style-type: none"> That accounting is a discipline that can be studied That accountancy is a profession
Need to know	<ul style="list-style-type: none"> Definition of accounting About the accounting profession in Australia Factors impacting on accounting
Using this knowledge	<ul style="list-style-type: none"> Accountants <i>provide information for decision-making</i> <i>Helps to evaluate the performance</i> of a business through the application of accounting standards Accountants are accountable for their actions to the professional body of which they are a member

ACCOUNTING VOCABULARY

Accounting
Accounting bodies
Accounting standards
CPA Australia
Ethical conduct
Financial reports

Institute of Chartered Accountants in Australia
Interested parties
International accounting standards
National Institute of Accountants

Learning objectives

After completing this section, you should be able to:

- 1 define 'accounting'
- 2 recall the objectives of accounting
- 3 recall the names of the main professional bodies in accounting in Australia
- 4 identify the broad sectors of the community in which accountants work
- 5 understand what is meant by the term 'accounting standards'
- 6 understand why it is important for accountants to act ethically
- 7 recognise the opportunities available for accounting graduates
- 8 discuss the factors impacting on accounting today.

The discipline

Learning objective 1

To understand the discipline of accounting, we first need to define accounting and discuss what accounting involves. We will then consider accounting as a profession.

Defining accounting

Accounting is an information system. It is the language of business. This language communicates information about business enterprises to interested people to enable them to make business and financial decisions.



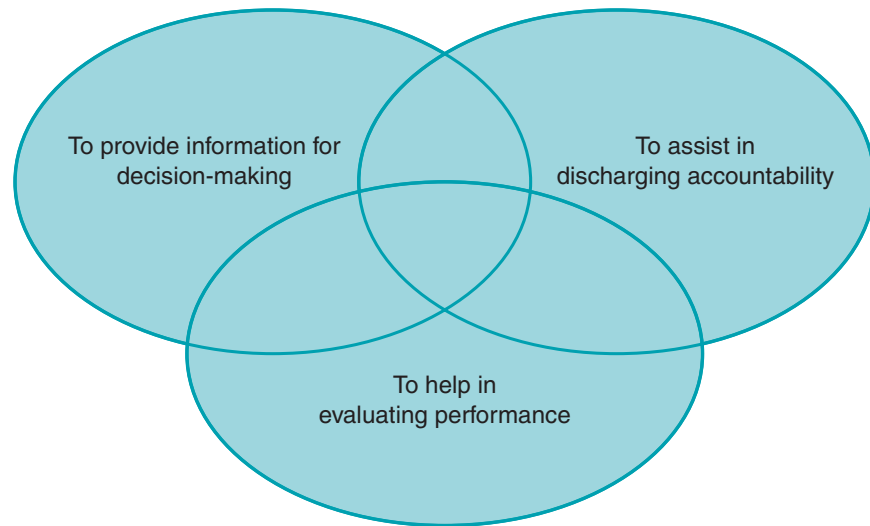
Accounting is the process of identifying, measuring, interpreting and communicating financial and other information to interested parties.

Learning objective 2

Objectives of accounting

There are three principal objectives of accounting, as shown in [1.1]. Accounting is performed for one or all of these three reasons.

[1.1] Objectives of accounting



Provide information for decision-making

Accounting communicates information in two ways:

- through financial figures that are produced from the data collected
- through the written reports that accompany these figures.

Interested parties use accounting information to make informed decisions about the current and future directions of an enterprise. Informed decisions can be made only with access to reliable, relevant and timely information. This information may be available from the **financial reports** of an enterprise.



Financial reports are classified summaries of an enterprise's financial standing, expressed in monetary terms and used in decision-making.

Parties both internal and external to the business organisation are users of information provided by accountants. Table [1.2] describes different users of accounting information and suggests some decisions they might need to make based on accounting information.

Assist in discharging accountability

One of the roles of the accountant is to ensure that proper control measures are in place. Wherever there is an opportunity for an error to be made or dishonesty to occur, controls are needed. Otherwise the information gathered from that part of the organisation might be inaccurate in some way. For example, the accountant needs to know the value of the cash collected in the enterprise during the day. This figure must be accurate. A control measure needs to be in place to ensure that the

[1.2]

	Users	Examples of decisions
Management/owners	Owners Executives Directors Managers	Constantly making decisions on the operations of the organisation. Are we meeting planned objectives? Should we expand? How will we finance this expansion? Do we need more employees in this section? What will it cost to give employees a pay rise?
Resource providers	Lenders (e.g. banks)	Is the business in a stable position to borrow and to subsequently repay borrowings and pay interest on the borrowings?
	Creditors	Is the business a good credit risk? Does it have a good reputation for paying its accounts regularly? Does it have access to sufficient cash to enable it to pay its account on time regularly?
	Employees	Is the employer able to pay wages and salaries in the future? Is there an incentive for employees to share in ownership through share schemes?
Government	Australian Taxation Office (ATO)	How much profit has been earned by the business, and how much tax is payable either by the owner/partners or by the company?
	Australian Securities and Investments Commission	Is the enterprise complying with the requirements of laws applying to companies in Australia?
	Other government departments	In overseeing a particular industry, is the business complying with various requirements (e.g. workplace health and safety requirements, pollution output, equal opportunity provisions)?
Other interested parties	Investors – current and potential	Is this enterprise worth investing in? Does it show the potential for growth? Is it well managed?
	Labour unions	Is the business that employs the workers we represent providing the required worker entitlements?
	Print/electronic media	Is there information about issues of interest that should be reported to the public (e.g. Coles Myer's decision to abandon its shareholder discount card)?
	Special interest groups	Is there an infringement of environmental rights that should be investigated and made public?

Being 'accountable' means being responsible for something.

cash in the cash register drawer matches the figure recorded on the cash register tape summary. The employee who operates the cash register is held responsible for ensuring that these two values agree.

Controls leading to accountability act as a protection device for all honest people within any organisation. They also allow checks to be made before the figures are used in the next stage of financial analysis. Accountability must run through the whole organisation so that all interested parties can rely on the information produced by the organisation.

Help in evaluating performance

Evaluation of performance is carried out both internally and externally, and different accounting reports are prepared to assist users with this task. Financial reports assist with the identification, measurement, interpretation, analysis and

Internal reports are often known as special reports, whereas reports prepared for external users are sometimes called general purpose financial reports.

communication of financial information. Analysis of the reports is usually the role of the accountant. The information enables a business to evaluate its financial situation based on its past performance. Financial analysis is the investigation of the reports to enable a business to assess its past, present and possibly its future performance.

For example, within a business, a manager uses an internal report called a cash budget to forecast the cash to be received and the amount of cash that will be required for payments. When the actual cash is received and paid, the totals can be matched against what was forecast and any variance can be investigated. This helps to control a very important element of any business: its cash.

External users such as lending institutions and investors will be interested in the financial performance and position of a business. External reports called an *income statement* (which indicates the profitability of the business) and a *balance sheet* (which indicates the worth of the business) are prepared at the end of a financial year. Financial performance can be evaluated in comparison with its forecasted performance targets, the performance of previous years and the profitability of competitors.

The profession

The accounting profession in Australia

Learning objective 3

Accounting, like other professions, has professional associations. Known as professional bodies, they regularly monitor the rules and standards that govern set practices. They also represent accountants in negotiations and consult with other bodies on behalf of their members. For example, the professional bodies would be consulted by the Australian Taxation Office about any new tax laws that have an impact on businesses, such as the goods and services tax (GST).

The three main accounting bodies in Australia are:

<www.cpaaustralia.com.au>

- CPA Australia Ltd (CPA Australia)



<www.charteredaccountants.com.au>

- Institute of Chartered Accountants in Australia (the Institute)



The Institute of
Chartered Accountants
in Australia

<www.nia.org.au>

- National Institute of Accountants (NIA).



Members of the Institute are known as chartered accountants, while members of CPA Australia are known as certified practising accountants. Members of the National Institute of Accountants identify themselves as members of the National Institute of Accountants. Graduates of recognised university courses can undertake postgraduate study with these organisations to qualify for membership. Members may work in the private, public and government sectors.

Accountants in the community

Learning objective 4

The accounting profession can encompass various fields of accounting, including auditing, company accounting, taxation, finance, cost accounting, budgeting, management advisory services, accounting information systems and government accounting, insolvency, e-business, financial planning and international accounting.

Auditing is the process by which independent expert opinion is sought on the validity and accuracy of the accounting records.

- **Private accounting** refers to accountants employed in non-government enterprises who are responsible for assisting managers in planning and controlling operations. The head of the accounting function is usually referred to as the financial controller or chief accountant. Duties of an accountant in this field include finance, auditing, management, budgeting, taxation, company accounting and accounting systems design.
- **Government accounting** refers to accountants within the various levels of government who ensure that financial regulations and procedures are followed. Their role is similar to that of an accountant in private accounting but they work for a government department instead of a commercial organisation. They also prepare reports required by the empowering bodies and elected representatives.
- **Public accounting** refers to accountants who are employed by firms committed to providing an independent, professional service to the public. Generally there are a number of divisions within these firms, including auditing, management advisory services and taxation.

Accounting services are even more diversified than in previous times. With many combined degrees (for example, commerce/law, IT/business) now being offered at various universities, accounting firms that employ graduates with such qualifications are able to offer a wide range of services to their clients.

Refer to chapter 19.

One growing area of specialisation in accounting is forensic accounting. This field of accounting is where accountants provide support to the legal profession, giving expert opinions in a court of law. Although accountants have performed this work for a long time, the complex and sophisticated nature of business transactions in the modern world gives rise to more complex white-collar crime. Skilled investigators are required to delve into the information available and find evidence of a fraudulent or criminal nature. This is called forensic accounting.

Accounting standards

Learning objective 5 Accounting standards ensure a uniform approach in their daily practice by accountants who are members of the profession in Australia.



Accounting standards are rules, practices and procedures with which members of the accounting bodies must comply.

International accounting standards are discussed on page 12.

The setting of Australian accounting standards has been restructured due to the implementation of the Commonwealth government's Corporate Law Economic Reform Program (CLERP). The 'new' Australian Accounting Standards Board (AASB) has been reconstituted as a Commonwealth authority. It supersedes the former AASB and the Public Sector Accounting Standards Board. The board reports to the Financial Reporting Council, which has been established to oversee the accounting standards setting process. The new Australian Accounting Standards Board sets the accounting standards for all enterprises that are required by law to report their results publicly in Australia.

Before June 2000 there were two sets of standards, but these were replaced by AASB standards that apply to all entities. Since 1 January 2005, Australia has adopted a set of accounting standards common to the accounting profession worldwide. These are known as international accounting standards, or IASs.

Ethical conduct

Learning objective 6 Ethical conduct is demanded of the accounting profession. Accountants have a fiduciary duty to their clients because they tend to their monetary affairs and are trusted to do so with honesty and professionalism. Therefore, the public in general has high expectations of the standard of moral behaviour in professions such as accountancy. This is because accountants are entrusted with sensitive information about individuals and their businesses or companies, especially with relation to profits and taxation.

Integrity involves trust and honesty.

Acting with objectivity in this profession means not being biased.

The ICAA, CPA Australia and NIA have established a code of ethical conduct for their members. They require members of these bodies to uphold the ethics and standards set down in the various regulations. The common fundamental principles on which the professional bodies base their codes of ethics are:

- integrity
- objectivity and independence
- confidentiality
- professional competence
- compliance with standards and other guidelines
- upholding the image of the profession
- the public interest.

Opportunities for accounting graduates

Learning objective 7 Study in accounting is often the springboard for a range of diverse and varied careers in the business world. Not all accounting graduates move into strictly accounting roles; however, because of their understanding of the important financial functions of business, they are well placed to take on managerial positions in a variety of businesses. Accounting skills are very portable and Australian accounting qualifications are highly regarded around the world. The large public firms are generally international firms with offices in many capital cities overseas, thus giving their employees opportunities to gain experience internationally.

Review & practice 1

- a What** is 'accounting'? Define this term.
- b What** are the objectives of accounting?
- c Who** are the parties likely to be interested in the information provided by accounting?
- d Why** is it important that control measures be in place in a business?
- e How** is evaluation of performance achieved through the provision of accounting information?
- f What** are the processes that accounting uses to provide information for informed decision-making?
- g What** are the names of the three main professional accounting bodies in Australia?
- h What** principles bind members of the professional accounting bodies to ensure that they act with propriety for clients and the public?

Factors impacting on accounting

Learning objective 8

To understand accounting as a discipline (a body of knowledge) and the people who work in the discipline (the profession), we must consider the factors that are influencing the development of the discipline today and into the future.

Accounting is undergoing radical change due to the effects of globalisation and technology. Changing social expectations relating to business conduct, particularly in the light of serious corporate collapses in the early 2000s, also affect the profession. Legal implications and economic trends also influence decisions, which inevitably have an impact on accounting practices.

Legal implications

One of the roles of government, carried out by representatives elected by the people, is to set and revise laws. These laws reflect societal interests. Accounting is subject to these laws, and one facet of the role of the accountant is to ensure that all activities within the enterprise comply with the relevant laws.

Some of the more familiar laws that influence accounting procedures are:

- the *Corporations Act* administered by the Australian Securities and Investments Commission (ASIC)
- taxation law (including GST legislation)
- partnership law.

See <www.asic.gov.au>.
See <www.ato.gov.au>.

Sales tax was generally paid when goods were sold by a manufacturer or wholesaler to a retailer and applies only to certain goods manufactured in or imported into Australia.

The 'new tax system' came into force in Australia on 1 July 2000. A major element of it was a goods and services tax (GST). GST is a broad-based tax of 10% on the supply of most goods and services consumed in Australia. It is therefore called a consumption tax. In addition, changes were made to income tax, and sales tax was abolished on most goods.

The impact of GST on accounting has been significant. Businesses became the collection point for this consumption tax. Therefore, it became imperative that they have good record-keeping systems.

Technological trends

Technological advances have revolutionised the procedures for recording financial information. An increased obligation for record-keeping was imposed on businesses through the implementation of the GST. Therefore, when GST was introduced, many small businesses took the opportunity to convert their manual systems to computerised systems. Accounting software packages have reduced the burden to some degree. One of the benefits of this trend is that fewer small businesses are keeping inadequate records, which are known to be a major cause of business failure. It is essential that students of accounting have a good understanding of the basic principles on which accounting is based and on which computerised accounting is subsequently based.

Accounting packages are sophisticated software tools with facilities to import and export data from other databases and spreadsheets and to present reports in many forms, including a graphical format. Users of accounting information recognise that accounting records contain valuable information that needs to be accessible in a clear and concise manner. Technology aids this process.

Business is now global. The rapid adoption of the Internet by business for e-commerce as well as information distribution is a clear example of how technology

Companies limited by guarantee are a special type of public company regulated by ASIC.

has impacted on business. A joint venture of CPA Australia and the ICAA is a company limited by guarantee, XBRL Australia Limited. This company has been formed to facilitate the development of an international business reporting language called Extensible Business Reporting Language (XBRL).

Just as HTML is the ‘language of the Internet’ and is embedded in web pages, similarly XML (Extensible Markup Language) has been developed to format or ‘markup’ business reports using the Internet to allow them to be read across a range of platforms (Microsoft, UNIX and so on).

Economic trends

Accounting requires decision-making, and decision-making implies that choices have to be made. Such choices are made within the national and international economic climate of the time. In business, enterprises must consider issues such as price structures, political stability, the possibility of recession and/or high growth periods, the value of the Australian dollar, the future demand for goods and services and long-term viability. All these economic trends affect the accounting decision-making of business owners.

Social expectations

Since employers have been required to make superannuation contributions on behalf of their employees, many more Australians have become interested in investments. There has always been, and is increasingly, a societal expectation that the investments held by the public will be secure. Public accountants, especially auditors, have a special duty (a fiduciary duty) to ensure that the information presented about the financial records of companies (in which public money is invested) is reported truthfully and in accordance with Australian accounting standards.

Corporate collapses

The four main corporate collapses in Australia in 2001 (HIH, OneTel, Ansett and Harris Scarfe) – together with the collapse of the very large, high-profile US companies Enron and WorldCom – have served to undermine public confidence in the ability of financial reports to indicate to shareholders, financial analysts and other interested parties that the enterprise is in financial difficulty. Accountants and auditors are implicated in these collapses. Their role is to ensure that ‘a true and fair view’ is reported to the public. Greg Larsen, CEO of CPA Australia in 2002, commented on the role of accountants and auditors in his address to the International Forum on Professional Ethics:

With each successive collapse here in Australia and overseas, audit firms were increasingly held to account and were deemed rightly or wrongly to have failed in their role as the investors’ safety net.

As formal investigations have progressed, understanding of the responsibility for flawed public accounting practices and ‘fudging the accounts’ has broadened. The public’s sense of betrayal at the hands of company auditors has not diminished, but the public is now also questioning the underlying integrity of business leaders, company directors and senior managers. There is a dawning recognition that all were complicit to a degree and all need to lift their game if they are to redeem themselves in the eyes of investors and the broader public ...

And the message is to broader audiences than just investors. Investors, employees, business partners and governments are questioning their business environment and especially the credibility of core functions such as auditing and accounting.

Source: Larsen, G 2002, 'The way forward after Enron's collapse', presentation to the International Forum on Professional Ethics, Beijing, 26–27 August.

Such large corporate collapses put a spotlight on accounting, so regulators try to address the concerns of the public by tightening the safeguards already in place.

Globalised accounting standards

The globalisation of business has brought the need for a 'common language', international accounting standards. Universally accepted accounting practices and financial reporting structures are being discussed, and Australia is participating in key international forums such as the International Accounting Standards Board (IASB) and the International Federation of Accountants (IFAC). Australia adopted international accounting standards on 1 January 2005. Although global standards seem sensible, the road towards them would appear to have been long and rocky, as Glenn Cheney outlines in the article in [1.3].

[1.3]

The dream of a common language

Glenn Cheney reports on the rocky road towards globally accepted accounting standards

The babel of financial statements accepted by the world's stock exchanges are enough to drive investors, not to mention accountants, crazy. Brazil insists that its own standards be used. Germany will accept its own or those of the International Accounting Standards Board (IASB). Australia allows only foreign companies to use IASB standards. Bangladesh requires all companies to use IASB standards. Cayman Islands accepts the standards of the US, the IASB, the UK, Canada, and others considered equivalent.

And then there's the United States.

The US currently requires domestic companies to meet the generally accepted accounting principles (GAAP) set by the Financial Accounting Standards Board (FASB), the American Institute of CPAs

(AICPA), and the Securities and Exchange Commission (SEC). Foreign companies may file under IASB standards if financial statements include a reconciliation disclosure. That's a rather reluctant acceptance of IAS, one echoed in a few other countries. It's a reasonable halfway step. The next step, however, is a leap, and not an easy one.

The EU plans to take the leap in 2005. Its member nations still accept various combinations of IASB, US, UK, and local standards, but with three years left to plan, the shift to IAS shouldn't be too difficult for companies or their auditors.

The difficulty was in the decision. The US, without which international standards will be of limited global value, has just begun to consider that decision ...

Despite its reluctance to adopt IAS, the US has been actively trying to harmonise its standards with those of the IASB ... FASB now makes every effort to approximate any existing international standard or the standards held by other nations ...

Extending that worst-case scenario, we could see the EU adopting IAS, the rest of the world following suit, and the US isolated with its own standards, surviving more by its economic power than the accessibility of its markets. The question then is whose companies will suffer more, America's or the rest of the world's? The answer may well determine whose accounting standards prevail.

Source: Extract from Cheney, G 2002, Australian CPA, March.

Review & practice 2

- a **What** are the main factors influencing accounting in today's world?
- b **What** major change did the accounting profession implement across the globe by 2005?
- c **When** did Australia adopt international accounting standards?
- d **Why** has society a high expectation of the professional behaviour of accountants and, in particular, auditors?

► Exercises 1.9 and 1.10, page 111

Part 2 – Accounting entity assumption and sole trader businesses

Already know

- That business needs accounting to assist with its finances
- That people own their own businesses
- That accounting provides information to interested parties
- That various factors impact on accounting

Need to know

- The concept of a sole trader enterprise
- Accounting entity assumption

Using this knowledge

- Accountants *provide information for decision-making* on the structure and legal status of the business
- *Helps to evaluate the performance* of a business through the application of the fundamental assumptions of accounting

ACCOUNTING VOCABULARY

Accounting entity assumption
Legal entity
Limited liability
Service-type business

Sole trader
Trading-type business
Unlimited liability

Learning objectives

After completing this section, you should be able to:

- 1 understand that accounting is based on some fundamental assumptions
- 2 understand the accounting entity assumption and its application to a sole trader
- 3 understand the legal status of a sole trader and, in particular, the concept of unlimited liability
- 4 apply the accounting entity assumption to service and trading businesses.

Accounting assumptions

Learning objective 1

Assumptions are concepts, rules and/or regulations on which all other decision-making is based. The discipline of accounting is based on a number of assumptions that all accountants accept and agree to follow. These concepts, rules and regulations allow for uniformity in financial records. The assumption that will be covered in this section is the accounting entity assumption, and it will be applied to a sole trader enterprise.



Sole trader

One structure of business ownership is a single-owner enterprise called a sole trader.



A **sole trader** is a person who is the only owner of a business.

A sole trader is not a legal entity in its own right. This is because the law does not discriminate between the person and the business. This is different for private and public companies which, in the eyes of the law, are considered entities in their own right, separate from their owners.

Accounting entity assumption

Learning objective 2

When we record financial information for a business, a basic assumption in accounting is that the owner is treated separately from the business. This is the essence of the accounting entity assumption



The **accounting entity assumption** presumes that a business enterprise (entity) has an existence separate from the private financial affairs of its owner/s.

An 'entity' can be someone or something.

This means that the owner and the business are separate accounting entities. All accounting information is kept from the point of view of the business. The owner's private financial affairs do not appear in the accounting records of the business.

The accounting entity assumption is in direct contrast to the concept of legal entity as it applies to a sole trader.

Legal entity

Learning objective 3

A person may choose sole trading over other types of business ownership, such as partnership or a private company, because a sole trader business is inexpensive and easy to establish. Sole traders are entitled to all the profits of their business enterprise, but a major disadvantage is that they are also solely responsible for all debts.

In the eyes of the law, a sole trader and the business are considered to be the one entity. As one legal entity, the owner is responsible for the actions and debts of the business.

Should the business wish to engage in a contract such as borrowing money from a bank in order to expand, the bank does not have the name of the business on its legal documents. Instead, the name of the sole trader is used. The sole trader enters into a legally binding agreement, not the business. If the business wishes to sue a supplier for loss of profits due to a strike, then the sole trader must take the action – the business may not.

Unlimited liability versus limited liability

The practical application of the legal status of the sole trader (the notion that the sole trader and the business are the one legal entity) is this: if the business is unable to pay its debts, then the sole trader is sued, not the business. This means that the sole trader has **unlimited liability**.



Insolvent means not able to meet financial commitments.

Unlimited liability means that the owner of a business is personally responsible (liable) for meeting any debts incurred by the business.

This legal requirement is a significant risk for the sole trader. It encourages sole traders to conduct their business affairs in a responsible manner because their personal belongings (such as their home) can be used to pay the debts of the business should it become insolvent.

Limited liability, in contrast, means that the liability for the debts of the enterprise is limited. This applies to owners of shares in companies. This is why private and public companies must have the word 'Limited' or its abbreviation 'Ltd' in their registered enterprise name.



Limited liability restricts the obligation of the investor, in the event of liquidation, to the full extent of their investment in the company (that is, the total value of their shareholding).

✓ Helpful hints

Accounting entity: from an accounting perspective, the owner is separate from the business regardless of the type of business ownership.

Legal entity: from a legal perspective, the sole trader (owner) and the business are considered the same entity (that is, not a separate legal entity).

Establishing a sole trader business

Operating a sole trader business has several advantages:

- Starting the business is simple and inexpensive.
- It requires no legal compliance if the owner chooses to use his or her own name as the business name.

Businesses such as Mick's Mowing Service, Designer Gift Baskets and Ashmore Computers, to be operated in Queensland by their respective owners, must have their business name registered under the *Business Names Act 1962*. However, if each of these businesses operated under the names of their owners – Michael Legg, Kerri Cooper and Zac Heliopolis – then registration of the business name would not be necessary.

Business names are registered by making application, with payment of a fee, to the Office of Fair Trading, which is a department of the Queensland government. Once the business name is registered, a bank account can be opened in the name of the business, and the business name must be displayed in a conspicuous place outside the business premises. The business name must also appear on letters, invoices, receipts and other documents issued by the business.

In addition to registering its name, a sole trader business must register for the GST if its annual turnover is greater than \$75 000. To register for the GST, a sole trader must also apply to the ATO for an Australian Business Number (ABN). An ABN is a unique 11-digit number that identifies the business in Australia and in all its dealings with the ATO. Having registered for the GST, the business must collect GST when any goods or services are sold (except for GST-free items). In addition, it can recover from the ATO any GST it pays for goods and services it acquired to use in the business, which is an incentive for registration for the GST even if the business is under the \$75 000 threshold.

See <www.consumer.qld.gov.au> for the Office of Fair Trading.

Service and trading businesses

Learning objective 4 A service business sells services rather than products (for example, a pool maintenance business). The following three case studies illustrate the concepts of legal entity versus accounting entity.

Case study

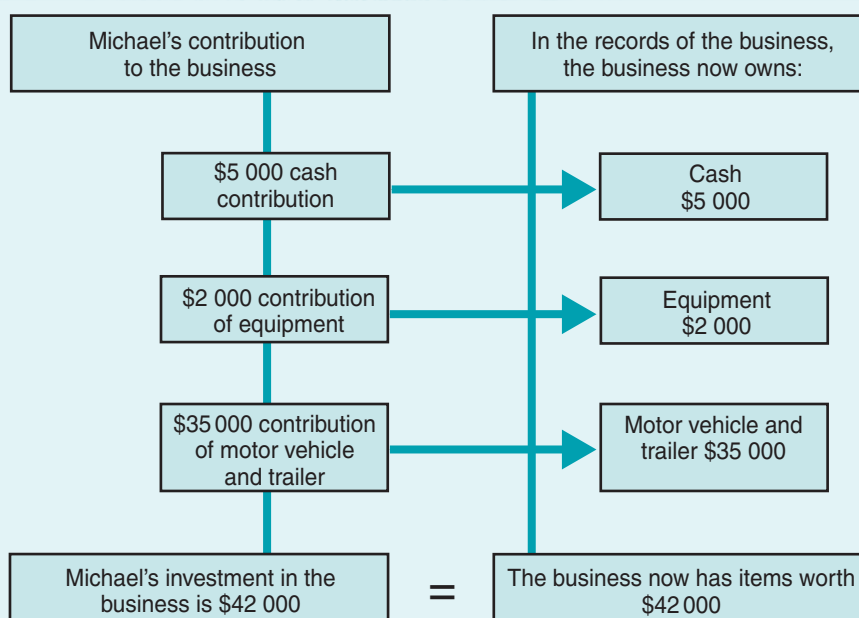
1

Michael Legg, a sole trader, owns a small business trading as Mick's Mowing Service. Michael's business is a service business because he is paid to perform mowing and gardening services for clients. Shown here is his business card.

Application of legal entity versus accounting entity Michael is Mick's Mowing Service – the business. This is how a lawyer would view the business if at some time in the future the business is sued. Michael's accountant, however, must look at the business in a very different light. When accounting for the business, Michael is considered separate from the business.

Michael's startup contribution of cash of \$5 000, equipment valued at \$2 000 and his motor vehicle and trailer valued at \$35 000, are totalled and it is said that he has a \$42 000 investment in the business. The items that make up the \$42 000 are now recorded in the books of the business.

Michael also owns shares, a house and a second car. These are not included in the business's finances. This is an application of the accounting entity assumption on which accounting is based.



Case study

2

Kerri Cooper owns an Internet-based business called Designer Gift Baskets:
<www.designergiftbaskets.com.au>

Kerri is a sole trader. Her business is a trading business because she buys and then sells goods. In Kerri's case, the goods (gourmet products, fragrant gifts, fruit and other products) are packaged and then sold as a basket. This is then delivered on behalf of the customer to the person nominated.

If Kerri wished to borrow money to expand her business, she would need to enter into a formal contract with a bank. The documents are completed in the name of Kerri Cooper, not Designer Gift Baskets. This is because the business itself is not a separate legal entity in the eyes of the law – Kerri *is* the business. Kerri and the business are considered the same legal entity.

However, our focus is on the accounting position. Kerri's accountant must prepare the books for her business using accepted accounting principles. One of the most important principles is the application of the accounting entity assumption – Kerri the owner is considered separate from her business in all financial transactions.

designer g!ft baskets



Case study

3

Zac Heliopolis owns a business called Ashmore Computers. On the right is his business sign, which hangs outside his shop.

Zac, like Michael and Kerri, is a sole trader. Although Zac employs three other people in his business, he is still a sole trader because he personally has made the investment in the business.

Zac's business has both a service and a trading component. Unlike Michael Legg, who has a service that he sells, and Kerri, whose business is a trading business because she sells goods (gift baskets), Zac's business sells goods (computers, software and accessories) and services computers that need to be repaired or upgraded.

Zac Heliopolis
trading as
Ashmore Computers

Computer Sales and Service – All brands
0419 458 332



The distinction between a service business and a trading business has no bearing on the ownership structure of the business, but it will affect the manner in which Michael, Kerri and Zac record their business transactions. For example, Zac might want to know how much of his business profits come from selling computers as against servicing and repairing computers. In order to have access to this information, he will have to structure the recording of information for his business

to allow this information to be collected. Kerri and Zac will have a stock of goods for resale and this influences the way in which they organise their business records.

✓ Helpful hints

- Sole traders operate businesses as single owners.
- Trading businesses sell goods.
- Service businesses sell services.
- Some businesses have distinct trading and service functions.

Review & practice 3

- What** is a 'sole trader'?
- What** are 'accounting assumptions'?
- What** is the critical distinction that the accounting entity assumption makes?
- What** does it mean to say that a sole trader and their business are one legal entity?
- Where** can a business name be registered?
- Why** does a sole trader have 'unlimited liability'?
- How** does one distinguish between a service and a trading business? Is it necessary to distinguish one from the other?

► Exercises 1.11 to 1.16, pages 111–12

Part 3 – The accounting equation

Already know	<ul style="list-style-type: none"> The accounting entity assumption
Need to know	<ul style="list-style-type: none"> The nature of assets, liabilities, owner's equity, revenues and expenses The accounting equation
Using this knowledge	<ul style="list-style-type: none"> Accountants <i>provide information for decision-making</i> through organising financial transactions based on the accounting equation

ACCOUNTING VOCABULARY

Account	Debit
Accounting equation	Double entry
Accounts payable	Expenses
Accounts receivable	Inventories
Assets	Liabilities
Business transaction	Mortgage
Capital	Owner's equity
Cost of goods sold	Revenues
Credit	Transaction analysis table

Learning objectives

After completing this section, you should be able to:

- 1 understand that an account is a device used in accounting to record all changes to a particular item
- 2 classify accounts into five different categories: revenue (R), expenses (E), assets (A), liabilities (L) or owner's equity (Oe)
- 3 use the accounting equation to express the relationship between A, L and Oe accounts
- 4 show how the accounting equation is derived from the accounting entity assumption
- 5 know that there is a twofold nature to every business transaction
- 6 state the rules on which accounting is based
- 7 explain how the rules of double-entry accounting are derived from the accounting equation
- 8 complete a transaction analysis table showing the accounts involved in the transaction and the necessary debits and credits
- 9 define 'revenues' and 'expenses'
- 10 understand the relationship of revenues to the elements of the accounting equation
- 11 understand the relationship of expenses to the elements of the accounting equation.

Accounts and types of accounts

To understand the concept of the accounting equation, we first need to understand that there are five categories of accounts. Accounting records are grouped into these five categories or types of accounts.

Learning objective 1
'Account' is often abbreviated to 'a/c'.



An account is a device used in accounting.

An **account** is used to record all changes regarding an item. It acts as a summary device.

Learning objective 2

There are five main types of accounts. They are: revenue, expense, assets, liabilities and owner's equity accounts. In order to classify these individual accounts into these five categories, each type of account must be defined.

Revenue is also called income.



Revenue

Revenue is income earned by a business.

Examples of revenue accounts are listed in [1.4].

[1.4]

Account	Description
Sales	Revenue earned from the selling of goods in a trading enterprise
Sales returns (-R)	Goods returned to a trading enterprise or an allowance given for defective goods. This account is sometimes called 'sales returns and allowances' or 'sales allowances' and is classified as a <i>negative</i> revenue account that reduces revenue
Fees revenue	Revenue earned from the selling of professional services
Service revenue	Revenue earned from selling a service
Commission revenue	Revenue earned by promoting another business's product or service
Interest revenue	Revenue earned due to the time value of money. This could be bank interest, interest from an investment or interest charged on overdue accounts receivable
Rent revenue	Revenue from the letting of premises

Expenses



Expenses are the costs incurred in the earning of revenue.

Examples of expense accounts are listed in [1.5].

[1.5]

Account	Description
Cost of goods sold	The expense to a trading business of purchasing goods for resale. This cost includes the cost of converting purchased goods into a saleable condition and transporting them to the sale location – for example, customs duty, freight and cartage inwards
Motor vehicle expenses	Expenses incurred in operating a motor vehicle such as fuel, repairs and servicing
Rent or lease expense	Expenses incurred in renting or leasing business premises in which the operations of the business are carried out
Salaries and wages	An expense incurred when engaging employees
Electricity expense	An expense incurred for using electricity in the business's operations
Interest expense	An expense incurred due to the time value of money. This expense could refer to interest on borrowings (loan) or interest charged on overdue accounts payable

Assets



Assets are items of value that are owned by a business.

Examples of asset accounts are listed in [1.6].

[1.6]

Account	Description
Bank	Cash held by the business in a bank account. If we draw more money out of the business's account than was in the account, a negative balance is recorded. This is called a bank overdraft.
Accounts receivable	Other people or organisations that owe money to the business because of sales made on credit. The terms 'debtors' and 'trade debtors' are also commonly used
Inventories	Items that are bought and sold by a trading business as its main source of revenue. The terms 'goods', 'merchandise' or 'stock' are also commonly used
Furniture	Furniture owned by the business
Fittings and fixtures	Shelves that have been installed in the premises to assist with the display of goods for sale
Motor vehicles	Vehicles owned by the business
Equipment	Computers, machinery, or other items owned by the business that are used by the owner or employees in the business
Buildings	Buildings or premises owned by the business
Land	Land owned by the business
Shares	An investment that the business has in another company
Loan to another enterprise	Money lent to another enterprise as an investment
Goodwill	The value of the reputation of the business, which is only valued when the business is purchased.

Liabilities



Liabilities are amounts that a business owes to other people or organisations.

Examples of liability accounts are listed in [1.7].

[1.7]

Account	Description
Accounts payable	People or organisations to whom the business owes money as a result of credit purchases. The terms 'creditors' and 'trade creditors' are also commonly used
Loan	Money borrowed from a bank, financial institution or other source
Mortgage	A loan taken out by a business, which is secured by assets. If the business could not pay back the loan, the assets would have to be surrendered (given back) to the lender

Owner's equity



Owner's equity is the value of any investment the owner has made in the business.

Examples of owner's equity accounts are listed in [1.8].

[1.8]

See the chart of accounts on the inside front cover for a more detailed list.

These examples of assets, liabilities, owner's equity, revenues and expenses are not comprehensive, and change from business to business. For example, furniture is generally regarded as an asset, but it would be considered an item of inventory for a furniture trading business. Other accounts will be introduced throughout the course of study.

The accounting equation

Learning objective 3

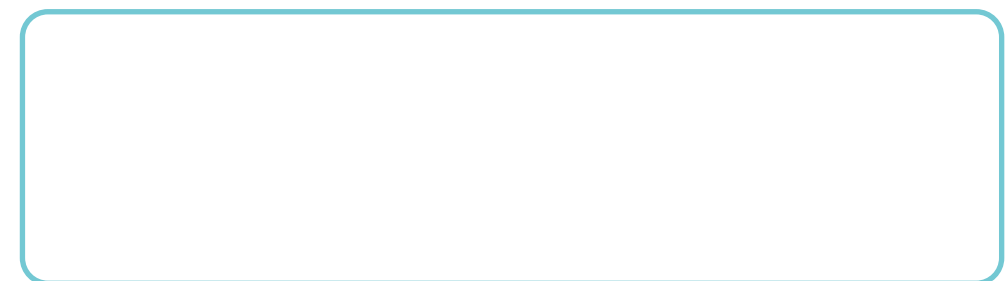
The relationship between revenues and expenses, and their relation to the accounting equation, are dealt with on pages 33–6.

The relationship between *three* of these accounts – assets (A), liabilities (L) and owner's equity (Oe) – is known as the *accounting equation*. Although revenue and expense accounts will be shown also to have a relationship with the accounting equation, three types of accounts are shown explicitly in the accounting equation. They will be the focus of this section.

This equation is like any other type of equation. The two expressions (sides) must be equal. The accounting equation is:

$$\text{Oe} = \text{A} - \text{L}$$

which represents:



The owner's investment in the business is represented on the left-hand side of the equation. The right-hand side of the equation represents the net worth of the business (assets less liabilities). This is the essence of the business – its net worth.

It follows, then, that whatever the owner invests in the business, the business is said to own. This, in turn, is what the business must return to the owner when the business ceases to exist. Consequently, owner's equity is seen as a special liability of the business. Any money the owner has invested in the business will eventually be repaid to the owner if, when the business is sold or closed, it is solvent (in a position to pay all amounts owed).

Linking the accounting equation and the accounting entity assumption

Learning objective 4

The accounting equation is derived from the *accounting entity assumption*. Recall that this assumption states that the owner and the business are *separate accounting entities*. The separation of the owner and the business is clearly seen when the business's net worth ($A - L$) is on one side of the equation, equal to the other side, O_e (the owner's contribution).

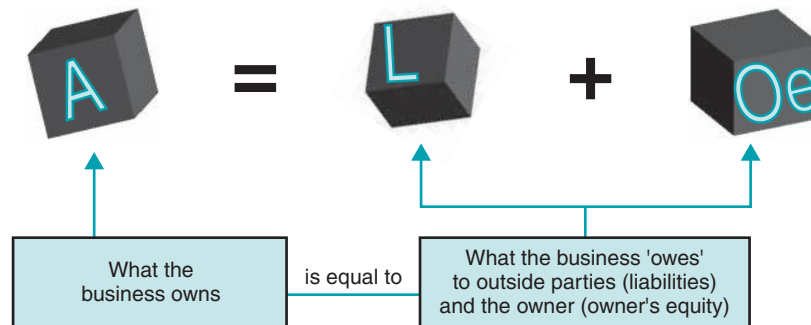
Just as equations can be rearranged, the accounting equation can be presented in a different way (see [1.9]).

[1.9]

$$O_e = A - L$$

$$A = L + O_e$$

$$L = A - O_e$$



When presented with $A = L + O_e$, we can see that all the liabilities (those owed to outside parties) and the amount owed to the owner are together on the right-hand side of the equation. As the equation illustrates, total assets are equal to the total liabilities in the business.

✓ Helpful hints

The accounting entity assumption states that the owner and the business are separate. From this assumption, the accounting equation $O_e = A - L$ can be derived. This equation shows, in an accounting sense, the separation of the owner and the business.

- The *owner* is represented by owner's equity.
- If the owner's investment is unknown, it is calculated using $O_e = A - L$.
- If the value of assets is unknown, it is calculated using $A = L + O_e$.
- If the value of liabilities is unknown, it is calculated using $L = A - O_e$.

Review & practice 4

- What** are the five main categories of accounts?
- What** are the three types of accounts that make up the accounting equation?
- How** can the accounting equation be derived from the accounting entity assumption?
- How** do you express the accounting equation in three different ways?



Debentures are loans made to companies as an investment for a fixed term

e How would you classify each of the following accounts?

- | | |
|------------------------------|--------------------------------------|
| i Accounts payable | ix Buildings |
| ii Mortgage | x Land |
| iii Equipment | xi Accounts receivable |
| iv Capital | xii Shares in another company |
| v Debentures | xiii Furniture |
| vi Loan from ABC Bank | xiv Cash in hand |
| vii Motor vehicles | xv Registered trademark |
| viii Bank | |

f Separate the items below into the correct columns with the headings as shown:

Owned (assets)	Owed (liabilities)	Owner's investment (Owner's equity)

- | | | |
|--|-----------------------------|-----------------------|
| • Accounts payable | • Delivery vehicle | • Capital |
| • Building | • Bank | • Land |
| • Cash on hand | • Premises | • Goodwill |
| • Quarry site owned by a quarry business | • Shares in ZXY Co | • Furniture |
| • Web domain name | • Loan to B Friend | • Accounts receivable |
| • Equipment | • Mortgage on buildings | • Copyright of lyrics |
| • Computers | • Patent for product design | • EFTPOS equipment |

EFTPOS =
Electronic Funds
Transfer at Point of
Sale

► Exercises 1.17 to 1.19, page 112



Twofold nature of business transactions

Learning objective 5 Business transactions have an effect on the accounting equation, and the role of accounting is to record those changes. We can begin to understand the recording process of accounting by observing the impact of such business transactions on the accounting equation. Then we can develop rules on which the recording process is based.

When a business transacts with either the public or another business, a business transaction is said to have occurred. Transactions are said to have a twofold nature because, no matter what the transaction, the equation will always change in at least two ways. It will, however, always remain equal.



A **business transaction** is a financial event that affects the elements of the accounting equation.

Effects of transactions on the accounting equation (excluding GST)

GST is the goods and services tax. The impact of this tax will be considered in detail later in this chapter.

To make sense of the accounting equation, we will use Michael Legg's business, Mick's Mowing Service, as an example. Assume that Michael began his business on 1 July 2009 and that the following transactions occurred:

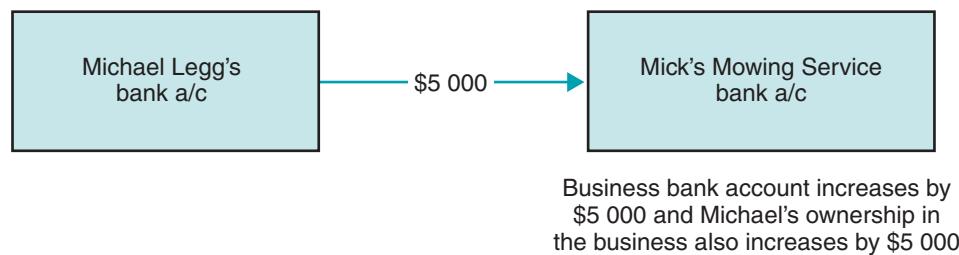
Transaction 1

2009

1 July Michael begins his business, Mick's Mowing Service, by depositing \$5 000 cash into a bank account in the name of the business.

Transaction analysis

By depositing cash into the business's bank account, Michael, as the owner, is said to have capital of \$5 000. This represents owner's equity, as it is a contribution of cash to the business by the owner. The business owes this amount to Michael. This amount would be paid to Michael if the business ceased to exist so long as the business remained solvent.



'Bank' can also be referred to as 'cash at bank' or 'cash'.

As Michael, the owner, is putting \$5 000 cash into the business:

- the business now has an asset, bank, of \$5 000; therefore, bank (an asset) **increases**
- capital (owner's equity) **increases**.

Putting this scenario into the accounting equation as at 1 July 2009:

A	=	L	+	Oe
Bank	=	\$0	+	Capital
\$5 000				\$5 000

Transaction 2

2009

2 July Mick's Mowing Service organises a loan of \$20 000 from AMU Bank.

Transaction analysis

The result of this transaction is that Mick's Mowing Service receives \$20 000 cash, which is deposited into a bank account in the name of the business. Therefore:

- bank (an asset) **increases**.

The business also must record that it now has a loan, which must be repaid to the lender. Therefore:

- AMU Bank loan (a liability) **increases**.

Putting this scenario into the equation as at 2 July 2009:

A	=	L	+	OE
Bank \$25 000	=	AMU Bank loan \$20 000	+	Capital \$5 000

Note that both sides of the equation are still in balance.

GST would be applicable in this transaction and will be addressed later in this chapter.

Transaction 3

2009

3 July Mick's Mowing Service pays cash for some equipment purchased for the business. The total value of the equipment is \$2 000.

Transaction analysis

- The asset 'bank' decreases, because cash is paid out to purchase equipment.
- Equipment, also an asset, increases, as the equipment is an item that the business now owns.

Putting this scenario into the equation as at 3 July 2009:

A	=	L	+	OE
Bank \$23 000 Equipment \$2 000	=	AMU Bank loan \$20 000	+	Capital \$5 000

Note that both sides of the equation are still in balance.

Transaction 4

2009

4 July Mick's Mowing Service purchases a second-hand trailer for the business valued at \$2 500. Michael pays ABC Co. a deposit of \$500 cash and enters into an agreement to pay the remainder of the debt at the end of the month.

Transaction analysis

A cheque is treated as cash in accounting.

This transaction has two parts, and the effect of each on the accounting equation must be shown. Let us break it down:

- A deposit was paid. This means that the asset 'bank' is affected. Bank will decrease by \$500.
- The remainder of the amount owing will be paid at the end of the month. ABC Co. is recorded as a liability called 'accounts payable' for \$2 000, as Mick's Mowing Service owes ABC Co. money.
- The business, as a result of this transaction, now owns a trailer worth \$2 500, so assets will increase by \$2 500. Therefore,
 - the asset 'bank' decreases
 - the liability 'accounts payable' increases
 - the asset 'trailer' increases.

A	=	L	+	OE
Cash \$22 500 Equipment \$2 000 Trailer \$2 500	=	Accounts payable ABC Co. \$2 000 AMU Bank loan \$20 000	+	Capital \$5 000

Check: Is there still a balance between the two sides of the equation?

Review & practice 5

Hint: Use the various forms of the accounting equation listed on page 24.

- a** Determine the missing figure in each case:

	Assets	=	Liabilities	+	Owner's equity
i	\$9 000	=	\$6 000	+	?
ii	\$50 000	=	?	+	\$20 000
iii	\$380 000	=	\$80 000	+	?
iv	?	=	\$120 000	+	\$200 000
v	\$100 000	=	?	+	\$53 000
vi	?	=	\$79 000	+	\$179 000
vii	\$83 000	=	\$30 900	+	?
viii	?	=	\$40 000	+	\$95 500
ix	\$345 000	=	?	+	\$125 000
x	\$78 900	=	\$25 100	+	?
xi	\$39 600	=	?	+	\$32 400

- b** Fabiene Evans begins business by contributing the following assets: \$40 000 cash, \$32 000 motor vehicle and \$6 000 equipment. What is Fabiene's investment in the business?
- c** Mitch Grant's business lists the following accounts: bank \$3 000, accounts receivable \$4 000, equipment \$40 000, owner's equity \$25 000. Determine the value of the liabilities of the business and then show how the accounting equation would appear for this business.
- d** Determine the value of assets, liabilities and owner's equity for J Suen, who has begun business as a travel agent: accounts receivable \$4 900, accounts payable \$3 200, bank overdraft \$6 800, equipment \$10 000, building \$150 000, mortgage on building \$100 000.
- e** Trish Healy is a natural therapies consultant. She began business on 12 March 2009. Show the impact on the accounting equation of each transaction using the following table. (Repeat the accounts and their values for each date.) The first entry has been completed as an example.

	A	=	L	+	Oe
Mar 12	Trish Healy begins a business by depositing \$33 000 cash into a bank account in the name of the business				
	Bank \$33 000	=	0	+	Capital \$33 000
13	Borrowed \$10 000 from her mother, Dot Murdoch				
		=		+	
14	Bought furniture for the business on credit from Able-to-Furnish Ltd for \$4 000				
		=		+	
15	Trish contributed some equipment she owned to the business. It is valued at \$11 500				
		=		+	
16	Paid \$2 900 cash for a new computer				
		=		+	

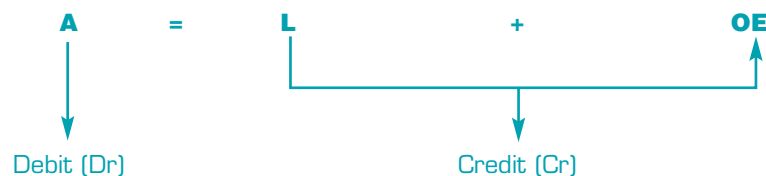
Rules of debit and credit

Learning objective 6 Once we are familiar with the accounting equation, we can develop some rules to follow when recording transactions and their effects on the accounting equation. We do this under the umbrella of double-entry accounting.

The rules of debit and credit are derived from the accounting equation. The elements of the equation are described as being of a particular nature. This means that, just as we learn to know the arbitrarily determined convention of which is our left hand and which is our right hand, so too in accounting we follow an arbitrary convention and declare the elements of the equation to be of a prescribed nature.

When we make the fundamental assumption that assets are of a **debit** nature, from this we derive from the equation that liabilities and owner's equity are opposite because they are on the other side of the equation. Hence, we assert that L and Oe are both **credit** in nature.

Assets are said to be of a debit nature, whereas liabilities and owner's equity are said to be of a credit nature.



'Dr' and 'Cr' are common abbreviations for debit and credit, respectively.

Once we accept that types of accounts are of a particular nature, then we also use the words 'debit' and 'credit' as *labels* that help describe the notion of increasing and decreasing the elements of the accounting equation.

Double-entry accounting

Learning objective 7 The double-entry principle is simply this: the total amount posted to the debit side of the accounts must be equal to the total amount posted to the credit side of the accounts.



An alternative method of recording is the single-entry system.

Double entry means that when a transaction is recorded, total debits for that transaction must equal total credits for the transaction.

Double entry is a logical extension of the accounting equation. Rules for increasing and decreasing the various elements of the accounting equation (A, L, Oe) follow from both the concept of double entry and the basic assumption that assets are of a debit nature. This is a built-in checking device for all entries because the double-entry system ensures that the accounting equation always remains in balance (equal).

The basic rule is:

- to increase an account, treat it the same as its nature.

In summary, the rules of double entry are:

- to **increase** an asset account, **debit** the account
- to **increase** a liability or owner's equity account, **credit** the account

- to **decrease** an asset account, **credit** the account
- to **decrease** a liability or owner's equity account, **debit** the account.

Rule summary:

↑ A debit
↓ A credit

↑ L credit
↓ L debit

↑ Oe credit
↓ Oe debit

Review & practice 6

- What** are the fundamental rules on which the concept of double entry is based?
- When** is an account debited?
- When** is an account credited?
- Why** do we have debit and credit rules?
- How** do the debit and credit rules relate to the accounting equation and the accounting entity assumption?
- State whether the following would result in a debit or credit to the account.
 - An asset account decreases in value.
 - A liability account increases in value.
 - Owner's equity decreases in value.
 - An asset account increases in value.
 - A liability account decreases in value.
 - Owner's equity increases in value.
- State whether the following accounts have increased or decreased in value.

i Bank – debit	ix Accounts payable – credit
ii Accounts receivable – credit	x Furniture – credit
iii Accounts payable – debit	xi Inventories – debit
iv Furniture – debit	xii Accounts receivable – debit
v Equipment – credit	xiii Loan from bank – credit
vi Owner's equity – credit	xiv Drawings – debit
vii Mortgage – debit	xv Cash management fund investment – debit
viii Bank – credit	

► Exercises 1.23 and 1.24, pages 113–14

Transaction analysis table

Learning objective 8 To assist with learning to apply the rules of double entry, we use a transaction analysis table. A transaction analysis table is simply a tool to allow us to think through the accounts involved and then to decide whether they are increasing or decreasing. This is an important step, as the rules for increasing and decreasing accounts can then be applied.

Refer to transaction on pages 26–7.

We apply the double-entry rules to the transactions for Michael Legg's business, Mick's Mowing Service, for the period 1–4 July 2009.

The transaction analysis table [1.10] is prepared by entering the date and the transaction in the first two columns and then analysing the transaction to determine the accounts involved (there must be at least two) and whether, as a result of the transaction, the accounts are increasing or decreasing. The nature of the account will always remain the same. If the account is increasing, write 'same' in the next column as a reminder to do the same as its nature.

[1.10]

Date 2009	Transaction	Accounts involved	Inc. or dec.	Account type	Nature of the account	Same or opposite to nature	Debit \$	Credit \$
July 1	Michael Legg begins his business, Mick's Mowing Service, depositing \$5 000 cash into a bank account in the name of the business	Bank Capital	↑ ↑	Asset Owner's equity	Debit Credit	Same Same	5 000	5 000
↓ Date of transaction	↓ Details of transaction	↓ Determine account details from the transaction column	↓ ↑ or ↓	↓ R, E, A, L or Oe	↓ Dr or Cr	↓ If ↑ same If ↓ opp	↓ Value	↓ Value

The completed transaction analysis table for Mick's Mowing Service would appear as shown in [1.11].

[1.11] Transaction analysis table

Date 2009	Transaction	Accounts involved	Inc. or dec.	Account type	Nature of the account	Same or opposite to nature	Debit \$	Credit \$
July 1	Michael Legg begins his business, Mick's Mowing Service, depositing \$5 000 cash into a bank account in the name of the business	Bank Capital	↑ ↑	Asset Owner's equity	Debit Credit	Same Same	5 000	5 000
2	Mick's Mowing Service organises a loan of \$20 000 from AMU Bank	Bank AMU Bank loan	↑ ↑	Asset Liability	Debit Credit	Same Same	20 000	20 000
3	Mick's Mowing Service pays cash for some equipment purchased for the business. The total value of the equipment is \$2 000	Equipment Bank	↑ ↓	Asset Asset	Debit Debit	Same Opp.	2 000	2 000
4	Mick's Mowing Service purchases a second-hand trailer for the business valued at \$2 500. Michael pays ABC Co a deposit of \$500 cash and enters into an agreement to pay the remainder of the debt at the end of the month	Trailer Bank Accounts payable – ABC Co.	↑ ↓ ↑	Asset Asset Liability	Debit Debit Credit	Same Opp. Same	2 500	500 2 000

✓ Helpful hints

The following terms and phrases are often used in business transactions:

- Only use the account 'capital' when the owner contributes assets to the business.
- If the word 'paid', 'received' or 'cash' is in the transaction, then the bank account must be affected.
- If both a business name and the word 'cash' are used, it is a cash transaction and the bank account is affected: ignore the name.
- If a business name is mentioned (but not cash), then a credit transaction has occurred. Record accounts receivable or accounts payable and the business name.

Review & practice

7

- a** Fill in the missing information in the transaction analysis table prepared for N Griffin's business in July 2009.

Date 2009	Transaction	Accounts involved	Inc. or dec.	Account type	Nature of the account	Same or opposite to nature	Debit \$	Credit \$
July 1	N Griffin begins business by depositing \$20 000 cash in the business's bank account	Bank Capital – N Griffin	..... .....	A Oe	Dr Cr	..... .....	
2	N Griffin borrows \$40 000 from AML Bank	Bank Loan from AML Bank	Inc. Inc.	A L	..... .....	Same Same		40 000
3	Purchases equipment on credit from A Smith for \$4 500	..... Accounts payable – A Smith	..... .....	A L	Dr Cr	..... .....	4 500	
4	Buys furniture for cash \$10 000	Bank	Dec.	A	Dr	Opp.		
5	Purchases more equipment on credit from M Clarke for \$23 000 and pays a deposit of \$3 000	Equipment Accounts payable – M Clarke Bank	..... ..... .....	..... ..... .....	..... ..... .....	..... ..... .....
6	N Griffin makes a contribution of capital of \$20 000	Bank .....	..... .....	..... .....	..... .....	..... .....
7	Repay \$1 000 of the loan to AML Bank	..... .....	..... .....	..... .....	..... .....	..... .....



- b** Use the completed table from part **a** to answer the following questions.
- i** **How** much cash does N Griffin have in the bank at the end of the day on 7 July?
 - ii** **What** was N Griffin's contribution to the business?
 - iii** **What** assets have been purchased during the month?
 - iv** **What** were N Griffin's sources of finance during July?
 - v** **How** would the accounting equation for N Griffin be represented as at 4 July.
- c** Complete a transaction analysis table for Annabel Nardi using the following transactions for August 2009.
- Aug 1 Annabel Nardi contributed the following assets to begin her business: cash \$15 000, equipment \$10 000 and motor vehicle \$22 500
 - 3 Purchased more equipment on credit from Super Suppliers for \$25 000 and paid a deposit of \$500
 - 8 Borrowed \$140 000 cash from XCC Bank
 - 15 Bought a site to be developed for the business through RRR Realty for \$125 000 cash
 - 24 Paid Super Suppliers the remainder of the amount owing

► Exercises 1.25 to 1.29, pages 114–15

Revenues and expenses

Learning objective 9

Revenues are income earned by a business.

Expenses are costs incurred in the earning of revenue.

We are now ready to see how revenues and expenses affect the accounting equation.

Revenue is earned by a service business when it sells its services, such as Mick's Mowing Service, and by a trading business when it sells its inventories (the goods purchased for resale), such as Designer Gift Baskets. Another word for 'revenue' is 'income'.

When services or goods are sold, revenue is said to be 'earned'.

The provision of a service is the prime reason that Michael Legg is in business, so service revenue is his main source of revenue. He records this revenue in an account called 'service revenue account'. When a trading business records the sale of its inventories, it records the income in the sales account.

In order to earn revenue, the business will incur costs. Thus, for Mick's Mowing Service to earn revenue, costs such as fuel for the vehicle, tip charges, mobile phone expenses, and maintenance and repairs to equipment must be incurred.

Similarly, in order for Kerri to receive orders via her Internet site, she must pay an Internet service provider (ISP). Other costs that Kerri might incur are: cost of goods sold (the products that she buys for the baskets, cost of the wrapping paper and cellophane that she uses to make the baskets look attractive, cost of the baskets in which she puts the products), and the cost of the courier she pays to deliver the baskets to the recipients. These costs are called expenses.

Revenues and the accounting equation

Learning objective 10

How do revenues relate to the accounting equation $A = L + Oe$?

Consider Mick's Mowing Service and the impact of revenues and expenses on the accounting equation. After accounting for the transactions from 1 to 4 July, the accounting equation for Mick's Mowing Service was represented as:

Refer back to page 27.

A	=	L	+	Oe
\$27 000	=	\$22 000	+	\$5 000

Transaction 5

2009

5 July Mick's Mowing Service received cash of \$400 from clients for mowing and gardening services.

The asset 'bank' increases by \$400, as cash has been received. The transaction has the effect of increasing assets to \$27 400. However, as transactions have a twofold nature, at least one other account must be affected. The other account affected is the service revenue account, which also increases.

Revenues have the effect of increasing owner's equity, as earnings (income) are increasing. An increase in revenue has a positive effect on the credit side of the accounting equation.

Revenues increase owner's equity, so revenues have a credit nature.

Asset (bank) increases by \$400; revenue (service revenue) increases by \$400. So the full impact of this transaction on the accounting equation of Mick's Mowing Service is as follows:

Accounting equation prior to earning revenue:

A	=	L	+	Oe
\$27 000	=	\$22 000	+	\$5 000

Accounting equation after earning revenue:

A	=	L	+	Oe
\$27 400	=	\$22 000	+	\$5 400
↑ A ↑ \$400				↑ R ↑ Oe \$400

As was the case with assets, liabilities and owner's equity, once the nature of the account is established, then the rules for increasing and decreasing that type of account can be determined.

If revenues have the effect of increasing owner's equity, and owner's equity is credit in nature, then revenues must have a nature the same as owner's equity. Therefore, the rules applying to revenue accounts are:

- to increase a revenue account, *do the same as its nature: credit the account.*
- to decrease a revenue account, *do the opposite to its nature: debit the account.*

Rule summary:

↑ R credit
↓ R debit

Transaction analysis

In a trading business, a sale is normally described in terms of the selling price that affects the sales account. The cost price of the goods sold must also be recorded, and this will be demonstrated later in this section.



A negative revenue account (e.g. sales returns) would have a debit nature.

Other types of revenue that a business may record are:

- rent revenue
- commission revenue
- consultancy revenue
- interest revenue
- service revenue
- fees revenue
- sales.

Learning objective 11

Expenses that are incurred in selling goods will be referred to as 'cost of goods sold' and will be recorded in an account of the same name. This concept will be dealt with later in this chapter.



Expenses and the accounting equation

Expenses are costs incurred in earning revenue. The impact that costs have on revenue is that they effectively *decrease* owner's equity, which is credit in nature. Expenses must have a nature that is opposite to owner's equity.

Expenses decrease owner's equity, so expenses have a debit nature.

Therefore, the rules applying to expense accounts are:

- to increase an expense account, *do the same as its nature: debit the account*
- to decrease an expense account, *do the opposite to its nature: credit the account*.

Rule summary:

↑ E debit
↓ E credit

Transaction 6

Transaction analysis

2009

6 July Mick's Mowing Service paid cash for the following expenses: fuel \$20, repairs to mower \$30, tip fees \$10, and mobile telephone rental and calls \$40.

The asset 'bank' decreases by the total of all the expenses – \$100 (as cash has been paid out). As transactions have a twofold nature, at least one other account must be affected; however, in this situation, four individual expense accounts would be increased.

The accounting equation was:

	A	=	L	+	Oe
Transactions 1–5	\$27 400	=	\$22 000	+	\$5 400

After transaction 6, the accounting equation would appear as:

	A	=	L	+	Oe
Transaction 6	\$27 300	=	\$22 000	+	\$5 300
	↑ A ↓ \$100				↑ E ↓ Oe \$100

After considering the impact of revenues earned and expenses incurred, the accounting equation now can be expressed as:

$$A = L + [Oe + R - E]$$

The difference between revenues and expenses is described as a 'profit' or a 'loss'. A profit occurs when revenues are greater than expenses, while a loss occurs when expenses are greater than revenues.

Profits increase owner's equity and losses decrease owner's equity.

A negative expense account would have a credit nature.

Profit (or loss) = Revenues less Expenses

- Profit increases owner's equity.
- Losses decrease owner's equity.

The rules of debit and credit are now complete, as we have considered the five types of accounts. The rules to learn are these:

Rule summary:

Revenues are of a **credit** nature; **credit** to increase, **debit** to decrease.

Expenses are of a **debit** nature; **debit** to increase, **credit** to decrease.

Assets are of a **debit** nature; **debit** to increase, **credit** to decrease.

Liabilities are of a **credit** nature; **credit** to increase, **debit** to decrease.

Owner's equity is of a **credit** nature; **credit** to increase, **debit** to decrease.

Review & practice

8

- What** is the basic nature of revenue and expense accounts?
- When** is an expense account debited? When is it credited?
- When** is a revenue account credited? When is it debited?
- Why** can the rules for debit and credit also be applied to revenue and expense accounts?
- How** do revenues and expenses relate to the accounting equation?
- Classify the items below as either revenues or expenses.

<ol style="list-style-type: none"> Service fees Advertising Cleaning of office Rent received from tenant Accounting fees paid Computer consumables Insurance Staff training 	<ol style="list-style-type: none"> Delivery fees paid Debt collector's fees paid Loss from theft Commission received Cash received as a settlement in a legal dispute Legal fees paid Sales of trading inventories
---	---
- Analyse the following transactions and draw up a transaction analysis table for Tullawong Dental Practice.

2009

- Mar 4 Three clients paid cash for dental services \$700
- 11 Paid cash for dental supplies \$450
- 12 Performed dental services and billed clients:
- J Lin \$1 600
- P Michaels \$2 000
- S Moloney \$1 000
- 16 Received \$1 000 from business tenant
- 19 Paid Optus Ltd for telephone service \$250
- 27 Paid for advertising in local directory \$390
- 30 Received interest on investment \$320
- 31 Client, J Hornibrook, paid bill \$500



- h** Consider the following transactions for Elliott's Elegant Decorating Service for the month of September.

Paid wages to part-time employee \$450, cash received for services rendered \$4 500, paid Curtains R Us \$950 for making curtains, billed a client for \$2 000 for services carried out this month, paid for printing of advertising brochure \$1 200, paid cash for management consultant's review of strategic plan for the business \$1 500, received \$3 200 cash directly to bank account for services.

The owner, Mark Elliott, asks you the following questions:

- i** **How** much cash did I receive this month?
- ii** If my bank account showed a debit balance of \$2 900 at the beginning of the month, **what** is my balance now?
- iii** **What** is my total revenue for the month of September?
- iv** **What** are my total expenses for the month of September?
- v** **What** is the profit for Elliott's Elegant Decorating Service for the month of September?
- vi** **Why** is my profit figure different from my cash figure?
- vii** Should I continue with this business?
- viii** **What** can I do to improve my profit position in the next month?

Part 4 – Analysing, journalising and posting transactions

Already know

- The accounting equation
- The twofold nature of business transactions and the interpretation of the effects of transactions on the elements of the accounting equation
- The rules for debit and credit

Need to know

- General journal approach to recording transactions

Using this knowledge

- Accountants *provide information for decision-making* based on the total value of transactions
- *Helps to evaluate the performance* of a business through the keeping of accurate, reliable and verifiable accounting records using double-entry accounting procedures.

ACCOUNTING VOCABULARY

Accounting process
Chart of accounts
General journal
General ledger
Journal

Narration
Post reference
Source documents
Trial balance
Working balance

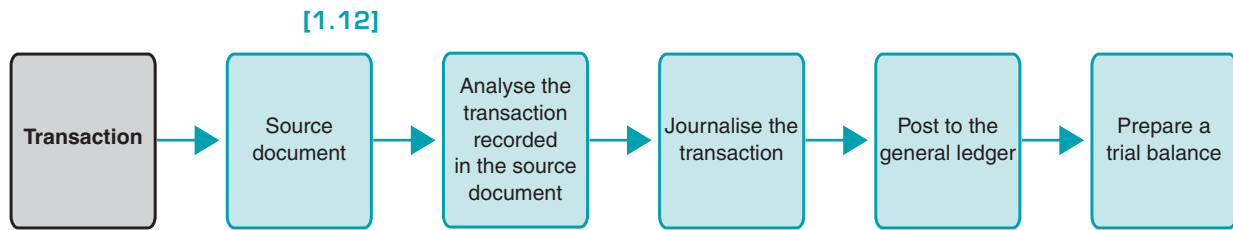
Learning objectives

After completing this section, you should be able to:

- 1 state the accounting process from transactions to trial balance
- 2 understand the function and importance of source documentation
- 3 consolidate your understanding of transactional analysis as a tool for determining accounts involved and assisting to put into practice the rules of the ledger
- 4 record transactions in a general journal
- 5 develop a chart of accounts and post transactions to a general ledger
- 6 prepare a trial balance.

Accounting process

Learning objective 1 The accounting process is a system for recording financial information. This process begins with a business event: a transaction that sets off a chain of events, which are called the accounting process. The steps to be followed in this process are shown in [1.12].



To this point, we have addressed the grey-shaded section of the diagram showing the accounting process. The remainder of the process will now be addressed.

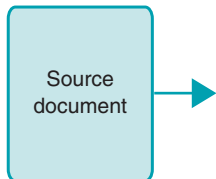
Function and importance of source documents

Learning objective 2 Every time a transaction occurs, details are recorded as evidence that the transaction has taken place. These details are recorded in a source document.

Source documents vary in appearance and in the way they are generated and transmitted, but they all collect essential data for entry into the accounting system.



A **source document** is evidence that a business transaction has occurred. It is used as the basis for entering information into an accounting system.



Typical source documents used in a business include receipts, cheques, tax invoices and adjustment notes.

Source documents can be generated either:

- manually (for example, handwriting a cheque or a receipt)
- by computer (for example, by printing a cheque using an accounting package, or by issuing a receipt that verifies a bill paid via phone banking, BPay or Internet banking).

The nature and importance of source documents will become clearer as more transactions are added to the process and similarities will be seen between the various transactions that have comparable source documents. The most common types of source documents that will be used in our study of accounting for sole traders are shown in [1.13].

[1.13]

Source document issued	Function	Abbreviation used in this text
Tax invoice	Acts as notification that money is owed	I
Adjustment note (credit note)	Issued to customers who have returned goods because they are faulty or have been overcharged	A
Receipt	Issued as evidence of monies received	R
Cash register summary	Evidence of the total cash sales for a period of time – e.g. one day's trading	CRS
Cheque butt record	Evidence of payment of money	CH

Email is often used to transmit source documents – e.g. tax invoices.

Numbering source documents

Source documents *issued* by a business are numbered consecutively for control purposes and so they may be located easily in both manual and computer systems. The number of the document is used in the accounting system and therefore is traceable. The manner in which a business numbers its own source documents is up to each individual business. Some businesses prefer to renumber incoming source documents so that they are consecutive and therefore more easily traced. Source documents received by a business may be identified by the reference number given by the issuing business. For example, incoming invoice 989 would be referred to as 'ref # 989'.

From transactional analysis to general journal

Learning objective 3

The transactional analysis is a learning tool to assist our thinking in determining the debit and credit entries. Once we have had some practice doing this type of sorting, we can discontinue using the transactional analysis. In the meantime, it is necessary to see how this tool corresponds to the more formal accounting record that businesses prepare from source document information (given in the transactions).

To record transactions from the information in the source documents, we need to keep a book called a **journal**. The word 'journal' comes from the French word for 'day' (*jour*). Business transactions are entered into a journal each day in chronological order. Source documents provide the information that is then recorded in the journal. A journal that records all types of transactions is called a **general journal**.

Specialised journals can also be used, and these will be dealt with in chapters 3 and 4.



The **general journal** is a means of recording transactions that occur in a business. It records the accounts affected and the necessary double entry that must take place in the accounting system in readiness for further steps in the accounting process.

The purpose of the general journal is to record transactions through the accounts affected, with their correct debit and credit entries.

EXAMPLE 1

Vicki Keenan began her business, Keenan's Colour Service, on 1 July 2009.

- Analyse the transactions that are recorded in the source documents indicated below and prepare a transaction analysis table.
- Prepare the general journal for the business for July 2009.

- July 1 Vicki opened a bank account in the name of the business and deposited \$20 000 cash as capital. Receipt number 001 was written out to record this transaction
- 5 Wrote out cheque 001 for \$100 to have the name of the business painted on the front window of the business premises. This is advertising for the business
- 7 Customer paid \$2 000 cash for colour consultancy service. Issued receipt 002
- 10 Vicki withdrew \$1 000 drawings for her own use on cheque 002
- 16 Charged a credit customer, GG Architectural, \$3 000 for services to date. Invoice 001
- 22 Purchased furniture on credit for \$2 000 from Idea Furniture. Received invoice 989
- 30 Loan for \$40 000 from Bendigo Bank. Cash has been deposited in the business's bank account (Approval letter received today)
- 31 Purchased a motor vehicle for \$42 000 cash from Gogo Motors Ltd cheque 003

The transaction analysis table for Keenan's Colour Service would be completed as shown in [1.14].

[1.14]

Analyse the transaction recorded in the source document	Date	Transaction	Accounts involved	Inc. or dec.	Account type	Nature of the account	Same or opposite to nature	Debit	Credit
	2009							\$	\$
	Jul 1	Vicki opened a bank account in the name of the business and deposited \$20 000 cash as capital. Issued receipt 001	Bank Capital	Inc. Inc.	Asset Owner's equity	Debit Credit	Same Same	20 000	20 000
	5	Wrote out cheque 001 for \$100 to have the name of the business painted on the front window of the business premises	Bank Advertising	Dec. Inc.	Asset Expense	Debit Debit	Opp. Same	100	100
	7	Customer paid \$2 000 cash for colour consultancy service. Issued receipt 002	Bank Service revenue	Inc. Inc.	Asset Revenue	Debit Credit	Same Same	2 000	2 000
	10	Vicki withdrew \$1 000 drawings for own use. Cheque 002	Bank Drawings	Dec. Inc.	Asset Negative owner's equity	Debit Debit	Opp. Same	1 000	1 000
	16	Charged a credit customer, GG Architectural, \$3 000 for services to date. Issued invoice 001	Service revenue Accounts receivable – GG Architectural	Inc. Inc.	Revenue Asset	Credit Debit	Same Same	3 000	3 000
	22	Purchased furniture on credit \$2 000 from Idea Furniture. Received invoice 989	Furniture Accounts payable – Idea Furniture	Inc. Inc.	Asset Liability	Debit Credit	Same Same	2 000	2 000
	30	Loan for \$40 000 from Bendigo Bank. Cash has been deposited in the business's bank account. (Approval letter 30/7/2009)	Bank Loan from Bendigo Bank	Inc. Inc.	Asset Liability	Debit Credit	Same Same	40 000	40 000
	31	Purchased a motor vehicle for \$42 000 cash from Gogo Motors Ltd. Cheque 003	Bank Motor vehicle	Dec. Inc.	Asset Asset	Debit Debit	Opp. Same	42 000	42 000

Preparation of the general journal

Learning objective 4

Once the transaction analysis table has been completed, the preparation of a general journal is a very simple exercise. Columns required for the general journal are explained in [1.15].

Journalise the transaction

In order to prepare a general journal for Keenan's Colour Service, draw up a heading for the general journal and the column headings as shown in [1.15].

[1.15]

Keenan's Colour Service General journal						
Date	Particulars	Dr Cr	Account no.	Post ref	Debit \$	Credit \$
↓	↓	↓	↓	↓	↓	↓
Use the date given in the transaction.	Use the names of the accounts from the accounts involved column. The order of the account names is determined by whichever account is to be debited. This account is written first in the particulars column. A narration follows the entry in brackets. It tells a short story of why the entry was made.	Write 'Dr' and then 'Cr' next to the accounts.	Each account is given a unique number. (Refer to the chart of accounts on the inside cover of this text.)	Leave this column blank until the next step in the process.	The amount is written in the debit and credit columns to correspond with the posting instruction.	

Figure [1.16] shows which columns from the transaction analysis table are used in the general journal.

Differences between the transaction analysis table and the general journal are more than simply that the analysis columns are not included. These differences occur because of generally accepted conventions that are followed when presenting the general journal.

General journal conventions

Note the following conventions, which are used when preparing a general journal.

- The account that is to be debited is recorded first. This convention makes posting easier in the next part of the accounting process and helps to reduce errors. Computer accounting printouts do not necessarily follow this convention, because the posting in a computerised system is automatic.
- The accounts that are to be credited are indented slightly from the accounts being debited. This is purely a visual aid, which also helps manual posting to be completed in the next step in the process.
- A narration is included to explain the reason for the transaction. The wording is not precise and can be as short or as long as desired. The inclusion of the source document number is recommended, as it allows the source of the information to be traced easily if needed. It is a convention to show the narration in brackets and then to rule off only under the particulars column, as shown in [1.16]. (See [1.13] on page 39 for the source document abbreviations used.)
- 'Dr' and 'Cr' are posting instructions that may seem superfluous given that the value is placed in the debit and credit columns as well. However, when posting manually, this convention helps to minimise errors.
- The post column is completed in the posting process. It should be left blank until this step is completed.
- It is useful to check that total debits equal total credits, by adding each column, but this is generally not indicated in the journal.

A spreadsheet may be used to present this tabular information.

A convention is a generally accepted way of doing something.

[1.16]

Date 2009	Transaction	Accounts involved	Inc. or dec.	Account type	Nature of the account	Same or opposite to nature	Debit \$	Credit \$
Jul 1	1 Vicki opened a bank account in the name of the business and deposited \$20 000 cash as capital. Issued receipt 001	2 Bank Capital 3	Inc. Inc.	Asset Owner's equity	Debit Credit	Same Same	20 000 4	20 000 5
	5 Wrote out cheque 001 for \$100 to have the name of the business painted on the front window of the business premises	Bank Advertising	Dec. Inc.	Asset Expense	Debit Debit	Opp. Same	100	100
	7 Customer paid \$2 000 cash for colour consultancy service. Issued receipt 002	Bank Service revenue	Inc. Inc.	Asset Revenue	Debit Credit	Same Same	2 000	2 000
	10 Vicki withdrew \$1 000 drawings for own use. Cheque 002	Bank Drawings	Dec. Inc.	Asset Negative owner's equity	Debit Debit	Opp. Same	1 000	1 000
	16 Charged a credit customer, GG Architectural, \$3 000 for services to date. Issued invoice 001	Service revenue Accounts receivable – GG Architectural	Inc. Inc.	Revenue Asset	Credit Debit	Same Same	3 000	3 000
	22 Purchased furniture on credit \$2 000 from Idea Furniture. Received invoice 989	Furniture Accounts payable – Idea Furniture	Inc. Inc.	Asset Liability	Debit Credit	Same Same	2 000	2 000
	30 Loan for \$40 000 from Bendigo Bank. Cash has been deposited in the business's bank account. (Approval letter 30/7/2009)	Bank Loan from Bendigo Bank	Inc. Inc.	Asset Liability	Debit Credit	Same Same	40 000	40 000
	31 Purchased a motor vehicle for \$42 000 cash from Gogo Motors Ltd. Cheque 003	Bank Motor vehicle	Dec. Inc.	Asset Asset	Debit Debit	Opp. Same	42 000	42 000

Keenan's Colour Service
General journal

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
July 1	2 Bank 3 Capital (Owner contributes cash. R001)	Dr 3103 Cr 5101		20 000 4	20 000 5
	5 Advertising Bank (CH001)	Dr 2301 Cr 3103		100	100
	7 Bank Service revenue (R002)	Dr 3103 Cr 1102		2 000	2 000
	10 Drawings Bank (CH002)	Dr 5101A Cr 3103		1 000	1 000
	16 Accounts receivable – GG Architectural Service revenue (I001)	Dr 3104.1 Cr 1102		3 000	3 000
	22 Furniture Accounts payable – Idea Furniture (ref # 989)	Dr 3201 Cr 4101.1		2 000	2 000
	30 Bank Loan from Bendigo Bank (Borrowed funds from bank. Approval letter 30/7/2009)	Dr 3103 Cr 4201		40 000	40 000
	31 Motor vehicle Bank (CH003)	Dr 3204 Cr 3103		42 000	42 000

Review & practice 9

- a** From the completed transaction analysis table for A Simpson, prepare a general journal for July 2009.

Date 2009	Transaction	Accounts involved	Inc. or dec.	Account type	Nature of the account	Same or opposite to nature	Debit \$	Credit \$
Jul 1	A Simpson borrowed \$20 000 from J and K Simpson to begin a business (memo 1/7)	Bank Loan from J and K Simpson	Inc. Inc.	A L	Debit Credit	Same Same	20 000	20 000
6	Purchased furniture for \$6 300 cash (cheque 001)	Furniture Bank	Inc. Dec.	A A	Debit Debit	Same Opp.	6 300	6 300
10	Wrote cheque to pay accounting fees \$400 (cheque 002)	Bank Accounting expenses	Dec. Inc.	A E	Debit Debit	Opp. Same	400	400
16	Bought office equipment on credit from Office Things Ltd \$1 000 (ref # 11)	Office equipment Accounts payable – Office Things Ltd	Inc. Inc.	A L	Debit Credit	Same Same	1 000	1 000
18	Charged a client, N Shiell, \$500 for services rendered (invoice 001)	Service revenue Accounts receivable – N Shiell	Inc. Inc.	R A	Credit Debit	Same Same	500	500
19	Purchased equipment on credit from M Lake for \$13 000 and paid a deposit of \$3 000 (ref # 2213/ cheque 003)	Bank Equipment Accounts payable – M Lake	Dec. Inc. Inc.	A A L	Debit Debit Credit	Opp. Same Same	13 000	3 000 10 000
23	\$3 000 cash received from customers for services rendered (receipt 001)	Bank Service revenue	Inc. Inc.	A R	Debit Credit	Same Same	3 000	3 000
25	Paid \$380 for rent expense (cheque 004)	Bank Rent expense	Dec. Inc.	A E	Debit Debit	Opp. Same	380	380
31	A Simpson withdrew cash for own use \$2 000 (cheque 005)	Drawings Bank	Inc. Dec.	–0e A	Debit Debit	Same Opp.	2 000	2 000

- b** Using the transaction analysis table you prepared for N Griffin (see review & practice 7a on page 32), prepare a general journal. Number all source documents, beginning at 40.
- c** Using the transaction analysis table you prepared for Annabel Nardi (see review and practice 7c on page 33), prepare a general journal. Number all source documents, beginning at 30.
- d** The transactions at the top of page 45 occurred for the business of A Dempsey. Complete a transaction analysis table and a general journal. Number all source documents, beginning at 210.



2009

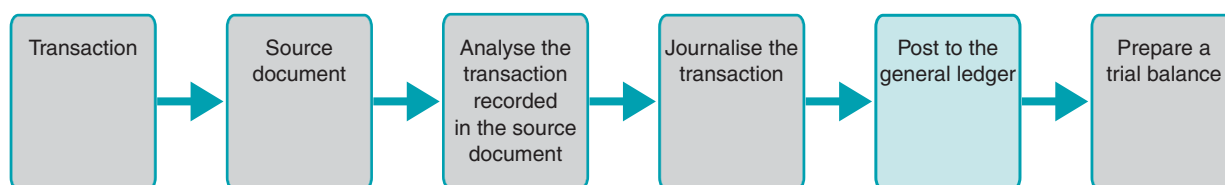
- May 1 A Dempsey began a business with the following assets: furniture \$4 000, equipment \$6 000, motor vehicle \$20 000
- 5 Received cash from a client – service revenue \$1 000
- 7 Paid rent expense \$500
- 12 Purchased stationery for the business for \$400
- 19 A Dempsey contributed \$7 000 cash to increase her investment in the business
- 22 Paid \$300 for motor vehicle expenses
- 24 Received cash for services performed \$800
- 26 Made an investment in a cash management account \$1 500
- 30 Bought equipment from Ace Pty Ltd on credit for \$3 000
- 31 A Dempsey withdrew cash for own use \$500

► Exercises 1.39 to 1.46, pages 118–20

From journals to the general ledger

Learning objective 5 Figure [1.17] indicates that a number of stages of the accounting process to trial balance have been completed. The stage in the process that occurs once transactions have been journalised is posting to the general ledger.

[1.17]



In order to post to the **general ledger**, we need an understanding of the format of accounts in the general ledger, a chart of accounts and posting procedures.

The function of the general ledger is to keep a record of all the accounts of a business. A general ledger can be kept in various forms and depends on whether a manual or a computerised accounting system is used.



A **general ledger** is a record of all the accounts of a business.

In a manual accounting system, a general ledger may be kept as:

- a bound book, specially ruled as a ledger
- a set of loose cards
- a book with pages that can be taken out if required.

If a computerised accounting system is kept, then the general ledger could be kept in the following forms:

- a database file that is part of a computer accounting package
- as a hard-copy printout of computerised records.

Accounts

As we saw in the previous section, accounts record all like information. For example, cash is received by a business and cash is paid out. In order for the owner of the business to determine the value of the business's cash at any point in time,

the bank account is created to record all the transactions involving cash that have been recorded in the general journal.

Accounts form the basis of the general ledger. The business's accounts are all kept in the general ledger.

Format of accounts

The format of an account can vary. Two popular formats are the T-format and the columnar format. Although different in layout, the concepts applied are the same. All accounts have three main features: the name of the account, a debit column and a credit column.

The T-account format:

This type of account format gets its name from the T-shape formed by the account name at the top, the debit side on the left and the credit side on the right.

Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
3103				Bank a/c			
(Debit side)				(Credit side)			

The columnar account uses a number of columns to display the information relating to the account. It is similar to the format used in statements issued to customers by banks.

The columnar account format:

Columnar accounts are also known as the 'statement' account format.

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
3103	Bank a/c				

Order of accounts in the general ledger

Accounts are listed in the general ledger in a certain order. Various ways can be chosen to order accounts in a ledger, but the order that will be used in this text is:

- 1 Revenues
- 2 Expenses
- 3 Assets
- 4 Liabilities
- 5 Owner's equity

R
E
A
L
Oe

Preparation of a chart of accounts

The chosen order of accounts in the general ledger is recorded in a file or a document called a **chart of accounts**. A numbering system is devised so that each account has a unique number.



The **chart of accounts** is a list of accounts, grouped together according to their account classification, with each account having a unique number.

This record acts as an index to the general ledger so that accounts can be located quickly when required. It is used in both computerised and manual accounting systems. Within each category, each account is given a unique number.

REALOe accounts are classified in the chart of accounts. These classifications are addressed in detail in chapter 10.

Inside the front cover of this textbook there is a chart of accounts that will be used for most exercises in this text. This chart of accounts is generic and should be considered flexible. For example, computers or computer equipment could use the equipment account. Should a new account be required, simply choose the next available number in the group to which the account belongs. Note that negative accounts are indicated with an 'A' following an account number to indicate that they are the opposite of the account with the same number.

In our chart of accounts:

- Revenue accounts begin with 1
- Expense accounts begin with 2
- Asset accounts begin with 3
- Liability accounts begin with 4
- Owner's equity accounts begin with 5.



One way of determining which accounts will be required is to look at the accounts needed for all transactions and then to order them using the chart of accounts in this textbook. To prepare a chart of accounts for Keenan's Colour Service, the accounts used in the general journal are considered and a list is compiled in R, E, A, L, Oe order. This is done by:

- scanning the account number column in the general journal
- listing the account number under the correct classification (R, E, A, L or Oe).

An account is listed only once. Accounts are sorted in numerical order under each heading. The resulting chart of accounts for Keenan's Colour Service is shown in [1.18] on the following page.

[1.18]

Keenan's Colour Service
General journal

Date 2009		Particulars		Account no.	Post ref	Debit \$	Credit \$
July	1	Bank	Dr	3103		20 000	
		Capital	Cr	5101			20 000
		(Owner contributes cash R001)					
	5	Advertising	Dr	2301		100	
		Bank	Cr	3103			100
		(CH001)					
	7	Bank	Dr	3103		2 000	
		Service revenue	Cr	1102			2 000
		(R002)					
	10	Drawings	Dr	5101A		1 000	
		Bank	Cr	3103			1 000
		(CH002)					
	16	Accounts receivable	Dr	3104.1		3 000	
		– GG Architectural					
		Service revenue	Cr	1102			3 000
		(I001)					
	22	Furniture	Dr	3201		2 000	
		Accounts payable – Idea Furniture	Cr	4101.1			2 000
		(ref # 989)					
	30	Bank	Dr	3103		40 000	
		Loan – Bendigo Bank	Cr	4201			40 000
		(Borrowed funds from bank. Approval letter 30/7/2009)					
	31	Motor vehicle	Dr	3204		42 000	
		Bank	Cr	3103			42 000
		(CH003)					

Chart of Accounts for Keenan's Colour Service

R	E	A	L	Oe
1102 Service revenue	2301 Advertising	3103 Bank	4101.1 Accounts payable – Idea Furniture	5101 Capital
		3104.1 Accounts receivable – GG Architectural	4201 Loan – Bendigo Bank	5101A Drawings
		3201 Furniture		
		3204 Motor vehicle		

In readiness for the reports that are prepared later in the accounting process, the assets are ordered according to liquidity (how quickly they can be converted to cash) and liabilities are ordered on the basis of time (how quickly they will need to be paid in cash).

Post to the
general ledger

Preparation of the general ledger

A general ledger is drawn up with the names of the accounts in a chart of accounts and in R, E, A, L, Oe order.

A general ledger using the **T-form** of accounts would be drawn up as shown below.

T-form					
Dr			Cr		
Date	Particulars	Post ref	Amount \$	Date	Particulars
				Post ref	Amount \$
1102	Service revenue a/c				
2301	Advertising a/c				
3103	Bank a/c				
3104.1	Accounts receivable – GG Architectural				
3201	Furniture a/c				
3204	Motor vehicle a/c				
4101.1	Accounts payable – Idea Furniture				
4201	Loan – Bendigo Bank a/c				
5101	Capital a/c				
5101A	Drawings a/c				

A general ledger using the **columnar** form of accounts would be drawn as shown below.

Columnar form					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
1102	Service revenue a/c				
2301	Advertising a/c				
3103	Bank a/c				
3104.1	Accounts receivable – GG Architectural				
3201	Furniture a/c				
3204	Motor vehicle a/c				
4101.1	Accounts payable – Idea Furniture				
4201	Loan – Bendigo Bank a/c				
5101	Capital a/c				
5101A	Drawings a/c				

Posting to accounts in a general ledger

Posting is the name given to the process that transfers the information from the journal into the individual accounts in the general ledger.

Step 1



Read the first line of the following general journal entry.

Keenan's Colour Service General journal (extract)					
Date 2009	Particulars		Account no.	Post ref	Debit \$ Credit \$
Jul 1	Bank	Dr	3103		20 000
	Capital	Cr	5101		20 000
	(Owner contributes cash, R001)				

The first line says this: go to the bank account and place \$20 000 on the debit side in the money column.

Keenan's Colour Service General ledger (extract) – T-format							
Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009				2009			
3103	Bank a/c						
			20 000				

Keenan's Colour Service General ledger (extract) – columnar format						
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$	
2009						
3103	Bank a/c			20 000		

Step 2



Read the second line of the following general journal entry.

Keenan's Colour Service General journal (extract)					
Date 2009	Particulars		Account no.	Post ref	Debit \$ Credit \$
Jul 1	Bank	Dr	3103		20 000
	Capital	Cr	5101		20 000
	(Owner contributes cash, R001)				

The second line says this: go to the capital account and place \$20 000 on the credit side in the money column.

Keenan's Colour Service
General ledger (extract) – T-format

Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009 5101				2009	Capital a/c		
							20 000

Keenan's Colour Service
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009 5101	Capital a/c				
				20 000	

By following these two steps, the correct amounts are now in the correct accounts and on the correct sides of the ledger.

The next two steps are the cross-referencing. This is done so that we can always trace, in each account, where the corresponding amount is on the opposite side of the general ledger.

Step 3



Go back to the first account in which you entered the amount on the debit side. In the particulars column, write the name of the other account in which you wrote the amount on the credit side.

Keenan's Colour Service
General ledger (extract) – T-format

Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009 3103				2009	Bank a/c		
	Capital		20 000				

Now go to the second account where you wrote the amount on the credit side and, in the particulars column, write the name of the first account in which you wrote the amount on the debit side.

Keenan's Colour Service
General ledger (extract) – T-format

Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009 5101				2009	Capital a/c		
					Bank		20 000

Keenan's Colour Service
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009					
3103	Bank a/c				
	Capital		20 000		20 000 Dr
5101	Capital a/c				
	Bank			20 000	20 000 Cr

Step 4



The post ref column indicates from which page in the general journal information has been obtained. As the general journal is the only source of information into the general ledger in chapter 1, the post ref column will not always be shown in the ledger accounts in this chapter.

In each account, fill in the remaining details in the date and post reference columns. The date is the day on which the transaction occurred as recorded in the source document. The post reference column contains the page number of the journal from which the information came (assume page 1). This is a cross-reference to the source of the information in the journals should the need arise to verify the information.

Keenan's Colour Service
General ledger (extract) – T-format

Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009				2009			
3103	Bank a/c						
Jul 1	Capital	GJ1	20 000				
5101	Capital a/c						
				Jul 1	Bank	GJ1	20 000

Keenan's Colour Service
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009					
3103	Bank a/c				
Jul 1	Capital	GJ1	20 000		20 000 Dr
5101	Capital a/c				
Jul 1	Bank	GJ1		20 000	20 000 Cr

When the posting has been completed in the general ledger, indicate this with a tick in the post column in the general journal. Alternatively, the post column could be used to show the posting date or the account number to indicate that the transaction has been posted.

Keenan's Colour Service
General journal

Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2009					
Jul 1	Bank	Dr 3103	✓	20 000	
	Capital	Cr 5101	✓		20 000
	(Owner contributes cash, R001)				

The completed posting of the general journal to the ledger for Keenan's Colour Service will appear as shown on page 53 (T-format) and page 54 (columnar format).

Keenan's Colour Service
General Journal

GJ1

Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 1	Bank Capital (Owner contributes cash R001)	Dr 3103 Cr 5101	✓ ✓	20 000	20 000
5	Advertising Bank (CH001)	Dr 2301 Cr 3103	✓ ✓	100	100
7	Bank Service revenue (R002)	Dr 3103 Cr 1102	✓ ✓	2 000	2 000
10	Drawings Bank (CH002)	Dr 5101A Cr 3103	✓ ✓	1 000	1 000
16	Accounts receivable – GG Architectura Service revenue (I001)	Dr 3104.1 Cr 1102	✓ ✓	3 000	3 000
22	Furniture Accounts payable – Idea Furniture (ref # 989)	Dr 3201 Cr 4101.1	✓ ✓	2 000	2 000
30	Bank Loan – Bendigo Bank (Borrowed funds from bank. Approval letter 30/7/2009)	Dr 3103 Cr 4201	✓ ✓	40 000	40 000
31	Motor vehicle Bank (CH003)	Dr 3204 Cr 3103	✓ ✓	42 000	42 000

Keenan's Colour Service
General ledger – T-format

Dr	Date	Particulars	Amount \$	Date	Particulars	Post ref	Amount \$	Cr
	2009			2009				
	1102				Service revenue a/c			
				Jul 7	Bank	GJ1	2 000	
				Jul 16	Accounts receivable – GG Architectural	GJ1	3 000	
	2301				Advertising a/c			
	Jul 5	Bank	100					
	3103				Bank a/c			
	Jul 1	Capital	20 000	Jul 5	Advertising	GJ1	100	
	7	Service revenue	2 000	10	Drawings	GJ1	1 000	
	30	Loan – Bendigo Bank	40 000	31	Motor vehicle	GJ1	42 000	
	3104.1				Accounts receivable – GG Architectural			
	Jul 16	Service revenue	3 000					
	3201				Furniture a/c			
	Jul 22	Accounts payable – Idea Furniture	2 000					
	3204				Motor vehicle a/c			
	Jul 31	Bank	42 000					
	4101.1				Accounts payable – Idea Furniture			
	Jul 22	Furniture	2 000					
	4201				Loan – Bendigo Bank a/c			
	Jul 30	Bank	40 000					
	5101				Capital a/c			
	Jul 1	Bank	20 000					
	5101A				Drawings a/c			
	Jul 10	Bank	1 000					

Keenan's Colour Service
General Journal

Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 1	Bank	Dr 3103	✓	20 000	20 000
	Capital (Owner contributes cash R001)	Cr 5101	✓		
5	Advertising Bank (CH001)	Dr 2301 Cr 3103	✓ ✓	100	100
7	Bank Service revenue (R002)	Dr 3103 Cr 1102	✓ ✓	2 000	2 000
10	Drawings Bank (CH002)	Dr 5101A Cr 3103	✓ ✓	1 000	1 000
16	Accounts receivable – GG Architectural Service revenue (I001)	Dr 3104.1 Cr 1102	✓ ✓	3 000	3 000
22	Furniture Accounts payable – Idea Furniture (ref # 989)	Dr 3201 Cr 4101.1	✓ ✓	2 000	2 000
30	Bank Loan – Bendigo Bank (Borrowed funds from bank. Approval letter today)	Dr 3103 Cr 4201	✓ ✓	40 000	40 000
31	Motor vehicle Bank (CH003)	Dr 3204 Cr 3103	✓ ✓	42 000	42 000
Keenan's Colour Service General ledger – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009					
1102	Service revenue a/c				
Jul 7	Bank	GJ1		2 000	2 000 Cr
16	Accounts receivable – GG Architectural	GJ1		3 000	5 000 Cr
2301	Advertising expense a/c				
Jul 5	Bank	GJ1	100		100 Dr
3103	Bank a/c				
Jul 1	Capital	GJ1	20 000		20 000 Dr
5	Advertising	GJ1		100	19 900 Dr
7	Service revenue	GJ1	2 000		21 900 Dr
10	Drawings	GJ1		1 000	20 900 Dr
30	Loan – Bendigo Bank	GJ1	40 000		60 900 Dr
31	Motor vehicle	GJ1		42 000	18 900 Dr
3104.1	Accounts receivable – GG Architectural				
Jul 16	Service – revenue	GJ1	3 000		3 000 Dr
3201	Furniture a/c				
Jul 22	Accounts payable – Idea Furniture	GJ1	2 000		2 000 Dr
3204	Motor vehicle a/c				
Jul 31	Bank	GJ1	42 000		42 000 Dr
4101.1	Accounts payable – Idea Furniture				
Jul 22	Furniture	GJ1		2 000	2 000 Cr
4201	Loan – Bendigo Bank a/c				
Jul 30	Bank	GJ1		40 000	40 000 Cr
5101	Capital a/c				
Jul 1	Bank	GJ1		20 000	20 000 Cr
5101A	Drawings a/c				
Jul 10	Bank	GJ1	1 000		1 000 Dr

✓ Helpful hints

The order for posting information to the general ledger is:

- 1 Enter *amounts* in the correct accounts on the correct sides. (Read and do exactly what the journal entry says: for example: 'go to the debit amount column and put \$20 000 in this account'.)
- 2 *Cross-reference the names of the accounts* in which the amounts have been written. It is a golden rule that the name of the account should never appear in its own particulars column.
- 3 Enter details such as *date and account number*.
- 4 Add ticks in the post column of the general journal to show that the posting has been completed.

Preparation of the trial balance

Learning objective 6

The **trial balance** summarises all the ledger account balances at a particular date. It is prepared to check the arithmetical accuracy of the ledger.



Active accounts are those accounts that have a balance.

A **trial balance** is a list of all active accounts in the general ledger and their working balances at a particular point in time.

This procedure is carried out periodically throughout the year (often once a month) and at the end of a financial period prior to the preparation of financial reports. A trial balance contains columns for the account number, account name, and the debit and credit dollar amounts.

It is usual to enter the accounts in the trial balance in the order in which they appear in the general ledger. Accounts in the general ledger that have zero balances can be omitted from the trial balance, as it serves no purpose to include them. These accounts are temporarily inactive.

If the accounting process has been carried out with accuracy, debits should equal credits (as per the double-entry principle). Note that the trial balance is only an arithmetical checking device for a business's accounting process – it is not a formal report. Also remember that if debits equal credits in the trial balance, it does not necessarily mean that everything is correct within the ledger. There may still be errors.

Working balance

If using T-accounts, a **working balance** needs to be calculated, on completion of all the accounts in the general ledger, as this format of account does not have the continuous running balance found in the columnar format.



A working balance is also called a pencil balance. It is often done in pencil so that it can be erased after it has served its purpose of assisting in the preparation of the trial balance.

A **working balance** is the difference between the two sides of a T-format account in the general ledger.

To determine the value of the working balance, follow these steps:

- 1 Total both sides of the ledger account.
- 2 Determine which side of the ledger account is the smaller side.
- 3 Subtract this figure from the total of the larger side.
- 4 The difference between the two sides is the working balance. This difference is written in pencil on the *larger side* of the ledger account.

For example, the bank account in the general ledger of Keenan's Colour Service has a credit side totalling \$43 100, while the debit side is \$62 000. The difference is \$18 900 and this is written on the debit side as a 'working balance'.

Keenan's Colour Service General ledger (extract) – T-format							
Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009				2009			
3103					Bank a/c		
Jul 1	Capital	GJ1	20 000	Jul 5	Advertising	GJ1	100
7	Service revenue	GJ1	2 000	10	Drawings	GJ1	1 000
30	Loan – Bendigo Bank	GJ1	40 000	31	Motor vehicle	GJ1	42 000
			18 900				

Working balances in each of the accounts are used in the preparation of a trial balance. When an account has only one figure in it, then this figure is the working balance. For example, the capital account has a credit working balance of \$20 000 and this figure is simply circled.

Keenan's Colour Service General ledger (extract) – T-format							
Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009				2009			
5101					Capital a/c		
				Jul 1	Bank	GJ1	20 000



Steps for completing a trial balance

- Step 1** Prepare working balances for all accounts in the general ledger (if using T-format accounts).
- Step 2** Prepare the heading in the trial balance and the appropriate column headings.
- Step 3** List each active account and its final working balance.
- Step 4** Total the figures in the debit and credit columns.

Keenan's Colour Service General ledger (extract) – T-format							
Dr				Cr			
Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Amount \$
2009				2009			
1102					Service revenue a/c		
				Jul 7	Bank	GJ1	2 000
				16	Accts receivable – GG Architectural	GJ1	3 000
							5 000

2301		Advertising a/c	
Jul 5	Bank	GJ1	100
3103		Bank a/c	
Jul 1	Capital	GJ1	20 000
7	Service revenue	GJ1	2 000
30	Loan – Bendigo Bank	GJ1	40 000
			<u>18 900</u>
3104.1		Accounts receivable – GG Architectural	
Jul 16	Service revenue	GJ1	<u>3 000</u>
3201		Furniture a/c	
Jul 22	Accounts payable – Idea Furniture	GJ1	<u>2 000</u>
3204		Motor vehicle a/c	
Jul 31	Bank	GJ1	<u>42 000</u>
4101.1		Accounts payable – Idea Furniture	
		Jul 22	Furniture GJ1 <u>2 000</u>
4201		Loan – Bendigo Bank a/c	
		Jul 30	Bank GJ1 <u>40 000</u>
5101		Capital a/c	
		Jul 1	Bank GJ1 <u>20 000</u>
5101A		Drawings a/c	
Jul 10	Bank	GJ1	<u>1 000</u>

Keenan's Colour Service
Trial balance as at 31 July 2009

Account no.	Account	Debit \$	Credit \$
1102	Service revenue		5 000
2301	Advertising	100	
3103	Bank	18 900	
3104.1	Accounts receivable – GG Architectural	3 000	
3201	Furniture	2 000	
3204	Motor vehicle	42 000	
4101.1	Accounts payable – Idea Furniture		2 000
4201	Loan – Bendigo Bank		40 000
5101	Capital		20 000
5101A	Drawings	1 000	
		<u>\$67 000</u>	<u>\$67 000</u>

Limitations of, and errors in, the trial balance

Preparing a trial balance will prove that the general ledger is in balance and that the double entry has been carried out correctly. If debits equal credits in the trial balance, it does not necessarily mean that the accounting carried out is correct. For example, the following errors will not be revealed in a trial balance that balances:

- an error in the analysis of a transaction – for example, a cheque payable for wages incorrectly recorded in the rent expense account

Incorrect account.

- Omitted transactions. • any transactions that have been totally omitted
- Duplicated posting. • any transaction entered more than once in the ledger
- Incorrect posting. • any 'compensating' error that may have been made – for example, one account incorrectly debited for \$10 and another account incorrectly credited for \$10
- Incorrect account and incorrect posting. • any transaction entered completely incorrectly – for example, a cheque received for \$25 for commission is entered as a credit of \$52 in the bank account and as a debit in the commission expense account of \$52
- Incorrect transcription. • incorrect transcription from a source document to a journal may have occurred. Poor handwriting will contribute to this type of error, with a common mistake being made by transcribing a 3 as an 8 or a 1 as a 7.

The trial balance is, despite the limitations mentioned above, a useful tool prior to the preparation of formal reports. It should be remembered that the trial balance is for internal use only and is principally prepared as a means of checking the accuracy of the double-entry procedure.

Locating errors in the trial balance

If the trial balance does not balance, the following is a suggested order for checking to locate the error (from least effort to most effort):

- Check arithmetic in adding the columns in the trial balance.
- Check that the accounts in the ledger have their 'normal' types of balances (that is, debit or credit). If an account does not have its normal type of balance, peruse it carefully. However, remember that the account may be correct – for example, a bank account with a credit balance.
- Check that the ledger balances have been correctly transcribed to the trial balance.
- Determine what the difference is between the totals in the trial balance and look for an amount that matches this in the ledger account. This will reveal any account balance that has not been entered in the trial balance.
- Halve the difference between the trial balance totals. Look for a balance of this amount in the ledger. This may reveal a posting to the incorrect side of the trial balance from the ledger.
- If the difference between the trial balance totals can be divided by 9, look for a transposition error – for example, \$723 instead of \$732.
- Check that balances in the accounts in the ledger are correct.
- If the error has not been located, it will be necessary to go back and check journals and source documents.

Review & practice 10

- a** Draw up a chart of accounts for the following in R, E, A, L, Oe order.
- Accounts receivable – G Pearse
 - Advertising
 - Bank charges
 - Buildings
 - Capital
 - Bank overdraft
 - Furniture
 - Land
 - Mortgage
 - Motor vehicle
 - Rent revenue
 - Delivery vehicle



- Cleaning
- Loan from bank
- Loan to A Friend
- Equipment
- Service revenue

b From the following general journal entries, prepare a chart of accounts and then post the entries to the general ledger.

**Kristopher Barnes
General journal**

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Feb 1	Bank Capital (Owner contributes cash, R001)	Dr Cr		22 000	22 000
5	Telephone Bank (CH001)	Dr Cr		300	300
7	Bank Service revenue (CRS)	Dr Cr		200	200
10	Printing expense Bank (CH002)	Dr Cr		1 000	1 000
16	Accounts receivable – C Mackie Service revenue (I001)	Dr Cr		600	600
22	Equipment Accounts payable – Furn Co. (ref # 2379)	Dr Cr		12 000	12 000
28	Equipment Bank (CH003)	Dr Cr		10 000	10 000

See [1.13] on
page 39 for
abbreviations used.

c Using the following ledger, calculate working balances for each account.

**R. Gibbons
General ledger (extract)**

Dr				Cr	
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
Bank a/c					
Mar 1	Rent	2 000	Mar 18	Service revenue	1 000
5	Office equipment	500	31	Office equipment	700
Furniture a/c					
Mar 6	Accounts receivable	3 000			
14	Capital	2 000			
Office equipment a/c					
Mar 1	Capital	2 000	Mar 5	Bank	500
31	Bank	700	21	Accounts receivable	100



- d** Use the general journals previously prepared in review & practice 9b, c and d (page 44) for Griffin, Nardi and Dempsey. Draw up charts of accounts and general ledgers, calculate working balances, and take out trial balances for these businesses.
- e** Amy Pepper's business had the following transactions during December 2009:
 - Dec 1 A Pepper contributed \$24 000 cash to the business as capital (R001)
 - 5 Purchased furniture for \$4 200 cash (CH001)
 - 9 Borrowed funds from YYY Finance Co. \$28 000 (R002)
 - 15 Purchased vehicle from WWW Cars Pty Ltd for \$18 000 cash (CH002)
 - 22 Returned furniture and received a full cash refund of \$4 200 (R003)
 - 24 Purchased more suitable furniture for \$15 000 cash (CH003)
 - 28 A Pepper decided to contribute premises to the business valued at \$150 000 (Memo)
 - 30 Bought equipment on credit from We've Got It Pty Ltd for \$34 000 and paid a deposit of \$5 500 (ref # 212, CH004)

Use these transactions to do the following:

- i** prepare a transaction analysis table and a general journal
- ii** prepare a chart of accounts from the general journal entries
- iii** post the general journal to the general ledger
- iv** calculate working balances and prepare a trial balance.

Part 5 – Transactions with GST, general ledger and trial balance

Already know

- The accounting process from source documents to trial balance

Need to know

- Nature of GST concepts
 - effect of GST on the supply chain
 - Australian Business Number (ABN)
 - consideration of relevant documents
- Recording for both service and trading entities using the general journal approach to recording, including GST and using perpetual inventories

Using this knowledge

- Accountants provide reliable, relevant and verifiable *information for decision-making and evaluating performance*

ACCOUNTING VOCABULARY

Acquisitions

Adjustments

GST clearing account

Input tax credits

Negative liability account

Supplies

Learning objectives

After completing this section, you should be able to:

- 1 understand how GST works and recognise transactions that involve the supply or acquisition of goods and services to which GST is applied
- 2 apply the basic principles of accounting (including GST) to the purchase of goods and services, payment of cash for purchases and other expenditure
- 3 apply the basic principles of accounting (including GST) to the sale of goods and services, receipt of cash for sales and other revenues
- 4 apply the basic principles of accounting (including GST) to withdrawals by the owner
- 5 apply the basic principles of accounting (including GST) to the correction of errors
- 6 consider other appropriate accounting entries.

Goods and services tax

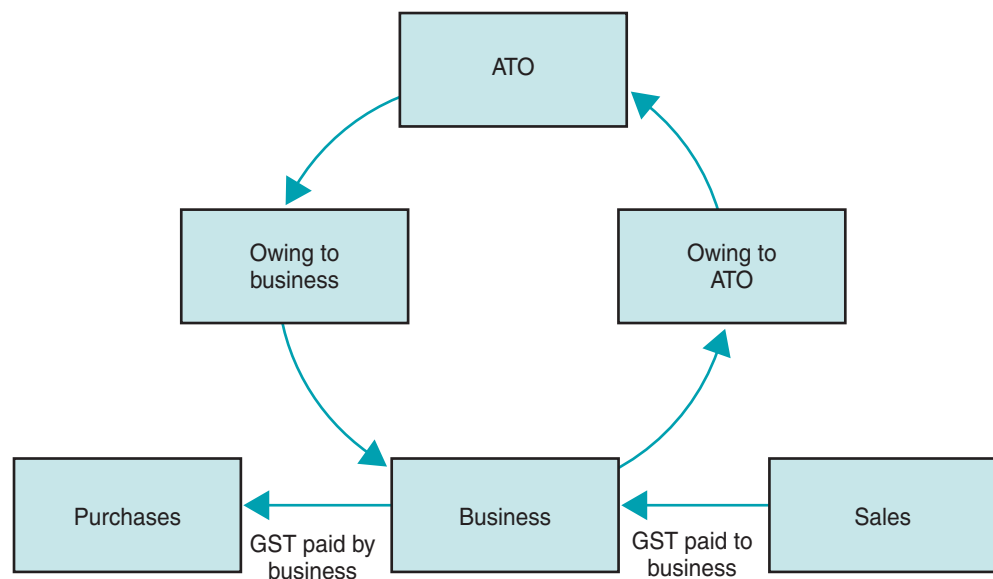
Learning objective 1

Since 1 July 2000, the goods and services tax (GST) has applied to the sale and purchase of most goods and services consumed in Australia. This tax is a consumption tax. It is a tax paid when goods/services are *consumed* by consumers. It is also known as a broad-based tax because it applies to a broad range of goods and services in Australia. Although supplies of some goods, such as basic food items, are GST-free, the majority of goods and services have 10% tax applicable.

GST is paid by end users – consumers. It is collected by business enterprises. Therefore, it affects almost all the sale and purchase transactions of a trading or service business.

At the time of writing, businesses are required to register for GST if their annual turnover is at or above the threshold of \$75 000, or \$150 000 for non-profit organisations. When a business that is registered for GST sells goods, it charges GST to its customers. This tax is collected by the business and then remitted to the Australian Taxation Office (ATO). The business must also pay GST when it purchases goods, but any GST paid by the business can be claimed back from the ATO. To claim back GST paid by the business when purchasing goods or services, a 'tax invoice' must be retained. GST that can be claimed back in this way is called an *input tax credit*. This is illustrated in [1.19].

[1.19] The money flow for GST



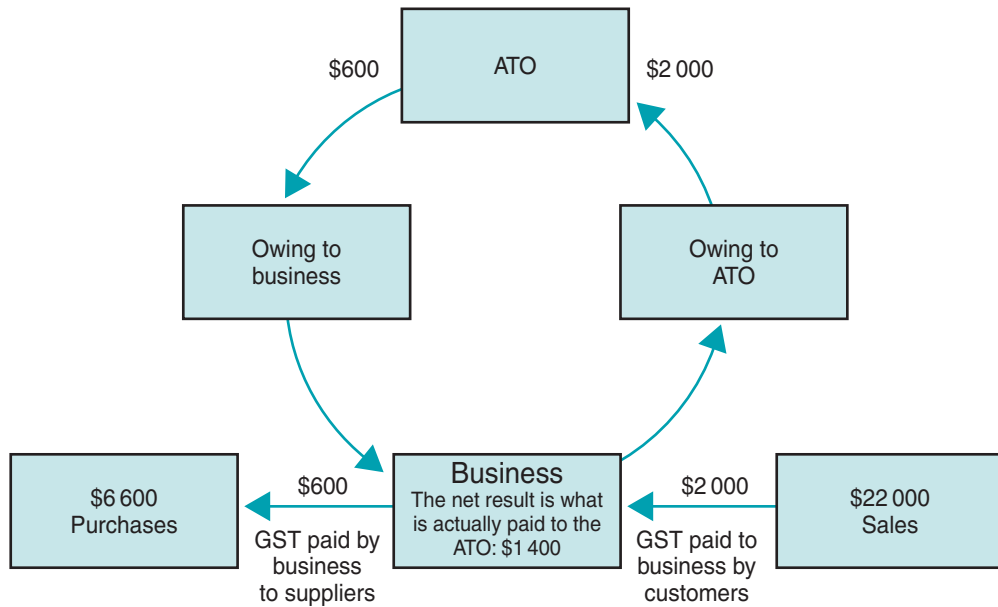
EXAMPLE 2

Lucy Hayes is an accountant. She charges 10% GST on the services performed for her clients. Assume Lucy has received \$22 000 from her customers and that this figure is inclusive of GST. Therefore, Lucy has collected GST of \$2 000. The value of GST is always calculated as 1/11th of the total amount paid by the end user (that is, the price).

Assume Lucy's business purchases supplies of stationery and office equipment totalling \$6 600 during the same period. Lucy has paid \$600 (1/11 x \$6 600) in GST for these purchases. As a business registered for GST, Lucy can claim back the \$600 that she has paid while purchasing goods and services for her business. She does this by offsetting this \$600 of input tax credits against the \$2 000 of GST that she has collected (\$1 400) and remits the difference to the ATO. Together with a cheque for \$1 400, Lucy is required to complete and send to the ATO a Business Activity Statement (BAS) either monthly or quarterly. On this statement she details the value of her sales and purchases, and discloses the GST collected and any input tax credits.

Lucy's GST transactions are shown in [1.20].

A Business Activity Statement is commonly called a BAS.

[1.20] The money flow for GST: Lucy Hayes, Accountant**Recording GST**

There are various names for the GST that is collected by the business and the GST that is reclaimed as input tax credits. These are shown in [1.21].

[1.21]

GST paid by customers when goods and services are sold, which the business remits to the ATO – a liability	GST paid by the business when purchasing goods and services, which the business claims back from the ATO – a negative liability (or an asset)
GST payable	Input tax credit
GST collected	GST receivable
GST liability	GST paid or GST payments
GST receipts	GST recoverable

This text will take an alternative but acceptable approach to recording GST. All GST collected from customers and paid to other parties will be recorded in a GST clearing account. The balance of this account will always be the amount owing to the ATO (if a credit balance) or the refund owing to the business by the ATO (if a debit balance).

The GST clearing account is essentially a liability account. The vast majority of enterprises collect more GST on the goods and services they supply than they pay on their purchase of acquisitions. The GST collected is payable to the ATO and is recorded as a liability in the books of the business. However, GST paid by the business on its acquisition of supplies and services reduces the amount owing to the ATO – it is deducted from the GST collected by the business and payable to the ATO. This is because GST is a consumer tax and not a business tax.

A GST clearing account is shown in [1.22].

[1.22]

GST clearing a/c
(liability – credit nature)

Dr	Cr
GST paid for purchases of supplies/services 600	GST collected from sales/service revenue 2 000

Input tax credits are recorded on the debit side of the account. These amounts reduce the total amount owed by the business to the ATO

GST clearing a/c
(liability – credit nature)

Particulars	Dr	Cr	Bal
GST collected from sales/service revenue		2 000	2 000 Cr
GST paid for purchases of supplies/services	600		1 400 Cr

GST collected by the business through the supply of goods or services is recorded on the credit side of the account. These amounts increase the total amount owed to the ATO

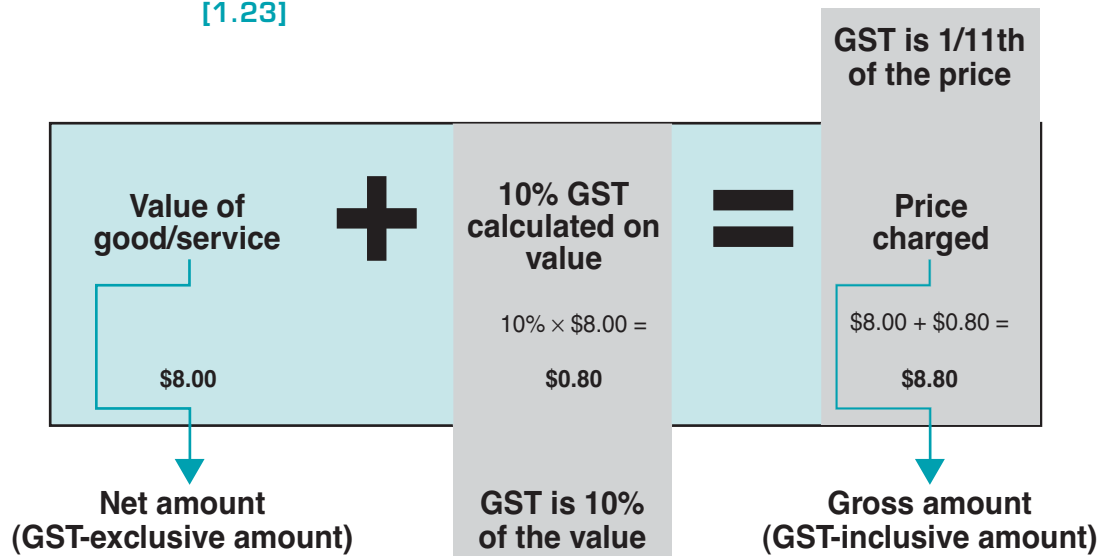
Calculating GST

The GST rate has been set by the government at a rate of 10% and must be included in the price that is advertised or displayed when being sold. Most businesses simply advertise the GST-inclusive price, although some will show the pre-GST value and then also show the GST to be paid by the purchaser.

To distinguish between GST-inclusive or GST-exclusive amounts, the *price* of the good/service is considered to be the GST-inclusive figure or 'gross amount'. Therefore, the GST can always be calculated as 1/11th of the *price*.

Alternatively, the value of the good/service is considered to be the GST-exclusive figure or 'net amount'. In this case, 1/10th of the value is added in order to find the price of a good or service. This is illustrated in [1.23]. Therefore, the amount of GST is always calculated as 1/11th of the price of a good/service or 1/10th of its value.

[1.23]



Remember this:
net amount = no GST;
gross amount
 includes GST.

When is GST not applicable?

GST is not charged on certain goods and services that are said to be GST-free. These goods and services are defined by the legislation and include basic food, education and most health services. Input-taxed supplies do not attract GST either. These supplies include most transactions that involve money and dealings with financial institutions (interest, bank charges), residential rents and the sale of residential premises (although GST is charged on the commission of an agent selling the residential premises). An entity that supplies input-taxed supplies is not able to claim input tax credits (that is, recover GST paid) on acquisitions to make these items.

Wages of employees do not attract GST; however, if the business employs contractors, then GST must be paid on the supply of their services. GST is always applicable when commission is received or paid.

'Rent' is regarded as commercial rent in all exercises unless otherwise stated.

Summary of items not subject to GST

- Wages
- Domestic rent
- Interest paid
- Interest received
- Bank charges
- Rates
- Loans
- Capital contributions
- Drawings of cash by owner
- Dividends
- Cash paid to accounts payable
- Cash received from accounts receivable

A Tax File Number (TFN) is still necessary for any dealings with the ATO.



GST terminology

Supplies are goods and services sold by a business. They may include other transactions such as supplying information or advice, providing hire equipment and leasing business premises.

Acquisitions include the goods and services bought by a business. They also include other transactions, such as when a business imports goods, obtains advice or information, or takes out a lease of business premises or business equipment.

Input tax credits are amounts claimed back for the GST paid on acquisitions (purchases). An input tax credit can only be claimed by a GST-registered business.

A **tax invoice** is the source document providing evidence that a transaction involving GST has taken place. A business must have a tax invoice to claim an input tax credit. The exception to this rule is for purchases of \$50 or less, excluding GST.

Adjustments are changes a business may need to make to the amounts previously recorded on tax invoices. For example, where goods are returned, the GST payable (or refundable) for a tax period will either increase or decrease.

An **Australian Business Number** (ABN) is an identifier used by all business enterprises in Australia and in all their dealings with the ATO.

GST and the impact on the supply chain

The total of the tax payable to the government is always 10% of the balance of the value of goods and services, no matter how many times the goods are bought and sold before they are in the hands of the consumer. As the goods flow from manufacturer to wholesaler to retailer, GST is charged and each party claims input tax credits. The consumer is at the end of the supply chain and is not able to claim back any GST paid.

The impact of GST on the supply chain is illustrated in [1.24].

[1.24]

Transactions	Reported in the Business Activity Statement	Australian Tax Office						
ABC Toy Manufacturers Ltd manufactures a toy called Baby Alive. It sells the toy to a wholesaler for \$11.00 (includes \$1.00 GST)	<table><tr><td>GST on sale</td><td>\$1.00</td></tr><tr><td>Less Input tax credit</td><td>0.00</td></tr><tr><td>GST forwarded to ATO</td><td>\$1.00</td></tr></table>	GST on sale	\$1.00	Less Input tax credit	0.00	GST forwarded to ATO	\$1.00	\$1.00 GST paid to ATO by ABC Toy Manufacturers
GST on sale	\$1.00							
Less Input tax credit	0.00							
GST forwarded to ATO	\$1.00							
Toy Wholesale Pty Ltd (toy wholesaler) sells the toy to a retailer for \$27.50 (includes \$2.50 GST)	<table><tr><td>GST on sale</td><td>\$2.50</td></tr><tr><td>Less Input tax credit</td><td>1.00</td></tr><tr><td>GST forwarded to ATO</td><td>\$1.50</td></tr></table>	GST on sale	\$2.50	Less Input tax credit	1.00	GST forwarded to ATO	\$1.50	\$1.50 GST paid to ATO by Toys Wholesale Pty Ltd
GST on sale	\$2.50							
Less Input tax credit	1.00							
GST forwarded to ATO	\$1.50							
Taringa Toys (toy retailer) sells the toy to a consumer for \$49.50 (includes \$4.50 GST)	<table><tr><td>GST on sale</td><td>\$4.50</td></tr><tr><td>Less Input tax credit</td><td>2.50</td></tr><tr><td>GST forwarded to ATO</td><td>\$2.00</td></tr></table>	GST on sale	\$4.50	Less Input tax credit	2.50	GST forwarded to ATO	\$2.00	\$2.00 GST paid to ATO by Taringa Toys
GST on sale	\$4.50							
Less Input tax credit	2.50							
GST forwarded to ATO	\$2.00							
		=						
		Total GST received by ATO on supply of good \$1.00 + \$1.50 + \$2.00 = \$4.50						
The consumer buys the toy from Taringa Toys for \$49.50 ($1/11 \times \$49.50 = \4.50 GST)								

Review & practice 11

- a** Who collects and remits GST to the ATO?
- b** Who can claim input tax credits?
- c** What is meant by the following terms, and how do they relate to each other?

i Value	iv Net amount
ii Price	v GST-inclusive
iii Gross amount	vi GST-exclusive
- d** What figure is divided into any price to find the GST component?
- e** Why are businesses able to deduct input tax credits from the final amount paid to the ATO?



f Calculate the GST component of the following amounts.

i \$11

iii \$3 080

ii \$1 100

iv \$9 999

g Complete the missing figures in the following table. The first one is done for you.

Price charged	GST	Value of the item
\$484	\$44	\$440
...	\$146	...
...	...	\$1 023
\$1 694	...	...
...	\$307	...
\$2 376	...	...
...	...	\$310

► Exercises 1.55 to 1.61, pages 122–3

Applying GST to a wide variety of transactions

Businesses under a given threshold nominate to pay GST to the ATO on a cash basis or an accrual basis. Discussion of these methods of payments is outside the scope of the text.

While most transactions attract GST, there are some that do not. Transactions that do not attract GST will be clearly identified in this chapter, but generally you should assume that any supply or acquisition of goods and services will require an entry to the GST clearing account. Unless otherwise stated, all exercises in this text will assume that the business has an ABN, is registered for GST and remits GST to the ATO on a monthly basis.

Purchase (acquisition) of goods and services

Learning objective 2

When a purchase of inventories, other assets such as furniture or goods, or services such as postage or advertising is made by the business, an acquisition is said to have occurred. Therefore, GST must be paid on the purchase. GST paid to another party is called an input tax credit because this amount can be reclaimed by the business from the ATO.

When purchases are recorded, the GST clearing account is debited.

Some businesses use an alphanumeric numbering system for their tax invoices.

GST and source documents

The source document that records a purchase or acquisition is an invoice which, for GST purposes, must be labelled a 'tax invoice'. This document is evidence that GST has been paid. It is held by the business in order to claim an input tax credit.

Although we refer to purchasing for cash, in reality businesses generally make cash payments by cheque. When payment is made for a purchase, the business will record its cheque number as the source document. Because GST will be paid on the cash purchase, the supplier will also issue a tax invoice, and this will be kept by the business in order to claim the GST paid as an input tax credit. In this chapter, incoming source documents will be referred to as 'ref # xxx' to distinguish them from source documents issued, except purchases for cash, when a cheque (CH) is the source document.

Assume all figures given are inclusive of GST unless otherwise stated.

Purchase of inventories (goods)

Inventories are an asset to a business, a good bought for resale. They are recorded in the inventories control account. Purchases of inventories from suppliers are made either with cash or on credit ('buy now, pay later').

- When inventories are purchased for cash or credit, the inventories account is debited (asset increasing) with the net amount (value).
- The gross amount (price) is credited to either the bank account (asset decreasing) or to an accounts payable account (liability increasing).
- The amount of GST on the purchase (1/11th of the price or 10% of the value) is recorded as a debit to the GST clearing account (liability decreasing) because this amount can be claimed back from the ATO. It will therefore reduce the business's total GST liability.

Transaction analysis

Purchase of inventories for cash

July 1	Ashmore Computers pays \$550 cash for goods	Inventories	A↑	Dr	\$500	
	(inventories) purchased for resale (CH668)	Bank	A↓	Cr		\$550
		GST clearing	L↓	Dr	\$50 (1/11th × \$550)	

Purchase of inventories on credit

July 1	Ashmore Computers purchases \$2 640 worth of goods for resale. These goods were purchased on credit from Tech Ltd (ref # 5304)	Inventories	A↑	Dr	\$2 400	
		Accounts payable – Tech Ltd	L↑	Cr		\$2 640
		GST clearing	L↓	Dr	\$240 (1/11th × \$2 640)	

The general journal entries for the transactions on 1 July would appear as follows:

Ashmore Computers General journal (extract)						
Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 1	Inventories	Dr	3105		500	
	GST clearing	Dr	4102		50	
	Bank	Cr	3103			550
	(Cash purchase of inventories – CH668)					
	Inventories	Dr	3105		2 400	
	GST clearing	Dr	4102		240	
	Accounts payable – Tech Ltd	Cr	4101.1			2 640
	(Credit purchase of inventories – ref # 5304)					

Exclusive of GST →
GST value →
Inclusive of GST →

✓ Helpful hints

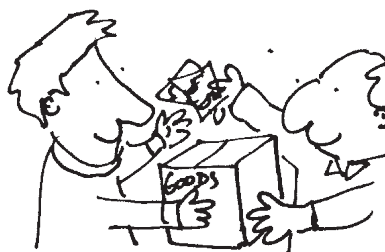
- When cash is paid, always begin the narration with the words 'Cash purchase of ...' or 'Cash payment for ...'.
- When items are purchased on credit, begin with 'Credit purchase of ...'.
- Use the chart of accounts on the inside front cover of this textbook to find account numbers for the general journal.
- The name of the supplier is recorded after the words 'accounts payable'. All accounts payable accounts are numbered as 4101 but are individualised by adding .1, .2 and so on to each account to become 4101.1, 4101.2 and so on.

Review & practice 12

Journalise the following transactions for Ashmore Computers on 2 July 2009.

- a Purchased \$330 worth of inventories for cash (cheque 669).
- b Purchased \$1 991 worth of inventories on credit from Good Suppliers Ltd (4101.2) (ref # 5434).
- c Nifty Computers (4101.3) sold Ashmore Computers \$3 300 worth of inventories for cash (cheque 670).
- d A supplier, JKL Pty Ltd (4101.4), sold to Ashmore Computers \$1 320 worth of inventories on credit (ref # 224).
- e AJF Ltd (4101.5) sold Ashmore Computers inventories for \$4 895 on credit (ref # 998).

► Exercise 1.62, page 123



Credit can be offered by a business to its customers. This is distinct from bank credit, where a customer uses a credit card to purchase items.

Purchase of assets (other than inventories)

Assets other than inventories are purchased by businesses for use in the business. These assets are an investment of the business's resources and are bought with the intention that they will help to generate revenue in the business. Thus a delivery vehicle may be purchased to assist in distributing goods to customers. This in turn means that more sales are expected because a delivery service can be offered to customers.

- When assets are purchased for cash or on credit, the asset account is debited (asset increasing) with the net amount (value).
- The gross amount (price) is credited to either the bank account (asset decreasing) or to an accounts payable account (liability increasing).
- The amount of GST on the purchase (1/11th of the price or 10% of the value) is recorded as a debit to the GST clearing account (liability decreasing) because this amount is reclaimable from the ATO. It is an input tax credit.

Transaction analysis

Purchase of an asset for cash

July 3	Ashmore Computers purchased furniture for the business valued at \$2 200 for cash (cheque 671)	Furniture	A↑	Dr	\$2 000	
		Bank	A↓	Cr		\$2 200
		GST clearing	L↓	Dr	\$200 (1/11th × \$2 200)	

Purchase of an asset on credit

July 3	Ashmore Computers purchased office equipment worth \$3 300 for use in the business. Bought on credit from The Office Place (ref # 331)	Office equipment	A↑	Dr	\$3 000	
		Accounts payable – The Office Place	L↑	Cr		\$3 300
		GST clearing	L↓	Dr	\$300 (1/11th × \$3 300)	

Purchase of an asset on credit with a part payment

July 3	Ashmore Computers purchased a motor vehicle for \$22 000 from CCC Motors and paid a deposit of \$4 000, agreeing to pay the remainder of the amount by the end of the month (ref # 443233; cheque 672)	Motor vehicle	A↑	Dr	\$20 000	
		Accounts payable – CCC Motors	L↑	Cr		\$22 000
		GST clearing	L↓	Dr	\$2 000	(1/11th × \$22 000)
		Accounts payable – CCC Motors	L↓	Dr	\$4 000	
		Bank	A↓	Cr		\$4 000

**Ashmore Computers
General journal (extract)**

Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 3	Furniture	Dr	3201		2 000	
	GST clearing	Dr	4102		200	
	Bank	Cr	3103			2 200
	(Cash payment for an asset – CH671)					
	Office equipment	Dr	3205		3 000	
	GST clearing	Dr	4102		300	
	Accounts payable – The Office Place	Cr	4101.6			3 300
	(Credit purchase of asset – ref # 331)					
	Motor vehicle	Dr	3204		20 000	
	GST clearing	Dr	4102		2 000	
	Accounts payable – CCC Motors	Cr	4101.7			22 000
	(Credit purchase of asset – ref # 443233)					
	Accounts payable – CCC Motors	Dr	4101.7		4 000	
	Bank	Cr	3103			4 000
	(Cash payment, deposit – CH672)					
	Motor vehicle	Dr	3204		20 000	
	GST clearing	Dr	4102		2 000	
	Accounts payable – CCC Motors	Cr	4101.7			18 000
	Bank	Cr	3103			4 000
	(Credit purchase of asset on ref # 443233 and payment on CH672)					

Alternatively, these two entries can be combined into one.

Review & practice 13

Journalise the following transactions for Ashmore Computers on 4 July 2009.

- Purchased \$1 100 worth of furniture for cash (cheque 673).
- Purchased \$2 835 worth of equipment on credit from BBB Ltd (4101.8) (ref # 09865).
- Bought equipment costing \$5 500 from Lots of Equip Ltd (4101.9) on credit (ref # 1154) and paid a 10% deposit in cash (cheque 674).
- Motor Mart sold Ashmore Computers a vehicle for \$44 000 cash (cheque 675).

Assume all figures given are inclusive of GST unless otherwise stated.

An alternative method of recording exists for the treatment of expenditure. See page 74.

In a service industry, supplies expense would be recorded for items used directly in providing the service – e.g. shampoo in a hairdressing salon.

Transaction analysis

Purchase of other goods/supplies and services (expenditure)

Supplies and services (stationery, advertising and so on) are purchased for use by the business and are costs (expenses) involved in operating the business. They are either paid for in cash or purchased on account (purchased on credit) with an agreement to pay for them later.

- When supplies and services are purchased for cash or credit, the expense account is debited (expense increasing) with the net amount (value).
- The gross amount (price) is credited either to bank (asset decreasing) or to an accounts payable account (liability increasing).
- The amount of GST on the purchase (1/11th of the price or 10% of the value) is recorded as a debit to the GST clearing account (liability decreasing) because this amount can be claimed back from the ATO and will therefore reduce the business's total GST liability.

Purchase of goods/supplies (not inventories) for cash

July 5	Ashmore Computers paid	Cleaning services	E↑	Dr	\$30	
	\$33 cash for cleaning	Bank	A↓	Cr		\$33
	services (cheque 676)	GST clearing	L↓	Dr	\$3 (1/11th × \$33)	

Purchase of good/supplies (not inventories) on credit

July 5	Ashmore Computers purchased \$440 worth of advertising from Ads Unlimited with whom the business has an account (ref # 29)	Advertising expense	E↑	Dr	\$400	
		Accounts payable – Ads Unlimited	L↑	Cr		\$440
		GST clearing	L↓	Dr	\$40 (1/11th × \$440)	

Ashmore Computers General journal (extract)						
Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 5	Cleaning services	Dr	2403		30	
	GST clearing	Dr	4102		3	
	Bank	Cr	3103			33
	(Cash purchase of services – CH676)					
	Advertising	Dr	2301		400	
	GST clearing	Dr	4102		40	
	Accounts payable – Ads Unlimited Ltd	Cr	4101.10			440
	(Credit purchase of services – ref # 29)					

Review & practice 14

Journalise the following transactions for Ashmore Computers on 6 July 2009.

- Purchased office stationery for \$627 from Works for the Office (4101.11) where a monthly account is held (ref # FF3998).
- Paid \$440 for insurance of premises (cheque 677).
- Paid commercial rent of \$1 320 for the month (cheque 678).
- Purchased \$330 of fuel and other motor vehicle supplies from Astrol Garage Pty Ltd (4101.12) on account (ref # 099980).

Purchases returns and allowances

The *Trade Practices Act* outlines legal reasons for returning goods to a supplier and the conditions under which a purchaser is entitled to a refund.

If a business purchases goods (inventories) from a supplier and then finds that the purchases have defects, are unsuitable, or have been damaged in getting to their location, those purchases may be returned to the supplier. Sometimes damaged items are not returned. Instead, an allowance is made on the price originally charged as an acknowledgement that inferior goods have been supplied. Although returns could apply to any asset purchased, this text will focus on the returns associated with the cash and credit purchase of *inventories* and will use the account name 'purchase returns' to indicate allowances made.

GST and source documents

Where a cash return is recorded, a receipt will be issued as cash is received.

The source document that verifies a credit purchase return or a credit purchase allowance is called an adjustment note. It is necessary to adjust the GST recorded on the tax invoice prepared when the original purchase was made. Because this is an incoming source document, it will be referred to as 'ref # xxx'.

Purchases returns (cash and credit)

Assume all figures given are inclusive of GST unless stated otherwise.

- An adjustment note has the effect of reversing all or part of the amount on the original tax invoice. If inventories purchased for cash or credit are returned, the inventory account is credited (asset decreasing) with the net amount (value).
- The gross amount (price) of the purchase return is debited to either bank (asset increasing) or to an accounts payable account (liability decreasing).
- The amount of GST on the purchase return (1/11th of the price or 10% of the value) is recorded as a credit to the GST clearing account (liability increasing) because this amount can no longer be claimed back from the ATO and will therefore increase the business's total GST liability.



Transaction analysis

Purchases returns – cash

July 7	Ashmore Computers returned \$44 worth of goods purchased for cash on 1 July (R217)	Inventories	A↓	Cr	\$40
		Bank	A↑	Dr	\$44
		GST clearing	L↑	Cr	\$4 (1/11th × \$44)

Purchases returns – credit

July 7	Ashmore Computers notified Tech Ltd (4101.1) that \$110 worth of goods purchased on credit on 1 July were faulty. The supplier agreed to adjust the value of the original invoice (ref # 432)	Inventories	A↓	Cr	\$100
		Accounts payable – Tech Ltd	L↓	Dr	\$110
		GST clearing	L↑	Cr	\$10 (1/11th × \$110)

**Ashmore Computers
General journal**

Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 7	Bank	Dr	3103		44	
	Inventories	Cr	3105			40
	GST clearing	Cr	4102			4
	(Cash – purchases returns R217)					
	Accounts payable – Tech Pty Ltd	Dr	4101.1		110	
	Inventories	Cr	3105			100
	GST clearing	Cr	4102			10
	(Credit purchases returns ref # 432)					

**Review &
practice 15**

Journalise the following transactions for Ashmore Computers on 8 July 2009.

- a** Returned \$66 worth of inventories purchased for cash on 2 July and received a refund (R218).
- b** Returned \$550 worth of inventories purchased on credit from Good Suppliers Ltd (4101.2) (ref # 09776).
- c** Nifty Computers (4101.3) paid a cheque for \$55 as a refund for goods returned (R219).
- d** A small number of goods supplied by JKL Pty Ltd (4101.4) were found to be damaged in part. Negotiation with the supplier resulted in an agreement to adjust the original invoice by \$22 (ref # 09877).

Cheques paid to accounts payable

When a cheque is written to pay an accounts payable:

- the bank account is credited (asset decreasing)
- the accounts payable account is debited (liability decreasing).

GST and source documents

A cheque is used to evidence the payment of cash to accounts payable. No entry is required for GST, as this was recorded at the time of purchase.

Transaction analysis

Cash payment to accounts payable

July 11 Ashmore Computers paid The Office Place \$3 300 in settlement of its account (cheque 684).

Accounts payable
– The Office Place
Bank

L↓ Dr \$3 300
A↓ Cr \$3 300

Ashmore Computers General journal

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 11	Accounts payable – The Office Place Bank (Cash paid to accounts payable – CH684)	4101.6 3103		3 300	3 300



Review & practice 16

Journalise the following transactions for Ashmore Computers on 12 July 2009.

- a** Paid \$1 320 to JKL Pty Ltd (4101.4) (cheque 679).
- b** Cheque 680 for \$2 838 was sent to BBB Ltd (4101.8) to pay the account held with this business.
- c** Paid Astrol Garage Pty Ltd (4101.12) the amount owing in full \$330 (cheque 682).
- d** Good Suppliers Ltd (4101.2) were sent cheque 683 for \$1 441.
- e** Paid cheque 685 for \$4 950 to Lots of Equip Ltd (4101.9).
- f** Cheque 686 for \$627 was sent to Works for the Office (4101.11).

► Exercises 1.67 and 1.68, page 124

EXAMPLE 3**Purchases of assets, inventories and other supplies and services, purchases returns of inventories and cash payments**

Blackall Computers had the following transactions for the month of June 2009.

- June 3 Purchased \$3 300 worth of inventories on credit from Trading Supplies (ref # 8876)
 Paid cash for electricity \$220 (cheque 000823)
 7 Purchased equipment from T Black Ltd for \$6 600 on credit (ref # T33398)
 9 Returned inventories valued at \$330 to Trading Supplies as they were the incorrect size (ref # 44)
 12 Paid Trading Supplies \$2 970 in settlement of account (cheque 000824)
 15 Purchased fuel and motoring supplies (charge to motor vehicle expenses) on credit from ABP Garage for \$253 (ref # 3503)
 16 Purchased \$4 400 worth of inventories for cash (cheque 000825)
 22 Returned \$77 worth of inventories originally purchased for cash to the supplier and received a cash refund (R3039)
 29 Paid T Black Ltd the amount owing (cheque 000826)
 30 Paid ABP Garage the amount owing in full (cheque 000827)

The general journal, chart of accounts (extract) and general ledger for Blackall Computers would appear as follows:

**Blackall Computers
General journal**

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jun 3	Inventories	Dr 3105	✓	3 000.00	
	GST clearing	Dr 4102	✓	300.00	
	Accounts payable – Trading Supplies	Cr 4101.1	✓		3 300.00
	(Credit purchase of inventories – ref # 8876)				
	Electricity	Dr 2409	✓	200.00	
	GST clearing	Dr 4102	✓	20.00	
	Bank	Cr 3103	✓		220.00
	(Cash payment for service – CH000823)				
7	Equipment	Dr 3205	✓	6 000.00	
	GST clearing	Dr 4102	✓	600.00	
	Accounts payable – T Black Ltd	Cr 4101.2	✓		6 600.00
	(Credit purchase of equipment – ref # T33398)				
9	Accounts payable – Trading Supplies	Dr 4101.1	✓	330.00	
	Inventories	Cr 3105	✓		300.00
	GST clearing	Cr 4102	✓		30.00
	(Credit purchase returns – ref # 44)				
12	Accounts payable – Trading Supplies	Dr 4101.1	✓	2 970.00	
	Bank	Cr 3103	✓		2 970.00
	(Cash payment – CH000824)				

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
15	Motor vehicle expenses	Dr 2412	✓	230.00	
	GST clearing	Dr 4102	✓	23.00	
	Accounts payable – ABP Garage (Credit purchase – ref # 3503)	Cr 4101.3	✓		253
16	Inventories	Dr 3105	✓	4 000.00	
	GST clearing	Dr 4102	✓	400.00	
	Bank (Cash payment for inventories – CH000825)	Cr 3103	✓		4 400.00
22	Bank	Dr 3103	✓	77.00	
	Inventories	Cr 3105	✓		70.00
	GST clearing	Cr 4102	✓		7.00
	(Cash purchases returns – R3039)				
29	Accounts payable – T Black Ltd	Dr 4101.2	✓	6 600.00	
	Bank (Cash payment – CH000826)	Cr 3103	✓		6 600.00
30	Accounts payable – ABP Garage	Dr 4101.3	✓	253.00	
	Bank (Cash payment – CH000827)	Cr 3103	✓		253.00

Chart of accounts (extract) for Blackall Computers

1 Revenue	2 Expenses	3 Assets	4 Liabilities	5 Owner's equity
	2409	3103	4101.1	
	2412	3105	4101.2	
		3205	4101.3	
			4102	

Blackall Computers General ledger (extract) – T-format						Blackall Computers General ledger (extract) – columnar format				
Dr					Cr	Date	Particulars	Debit \$	Credit \$	Balance \$
						2009				
2409		Electricity a/c				2409	Electricity a/c			
Jun 3	Bank	200.00				Jun 3	Bank	200.00		200.00 Dr
2412		Motor vehicle expenses a/c				2412	Motor vehicle expense a/c			
Jun 15	Accounts payable – ABP Garage	230.00				Jun 15	Accounts payable – ABP Garage	230.00		230.00 Dr

3103 Bank a/c

Jun 22 Inventories	70.00	Jun 3 Electricity expense	200.00
GST clearing	7.00	GST clearing	20.00
		12 Accounts payable	
		– Trading Supplies	2 970.00
		16 Inventories	4 000.00
		GST clearing	400.00
		29 Accounts payable	
		– T Black Ltd	6 600.00
		30 Accounts payable	
		– ABP Garage	253.00

3105 Inventories a/c

Jun 3 Accounts payable		Jun 9 Accounts payable	
– Trading Supplies	3 000.00	– Trading Supplies	300.00
16 Bank	4 000.00	22 Bank	70.00

3205 Equipment a/c

Jun 7 Accounts payable	
– T Black Ltd	6 000.00

4101.1 Accounts payable – Trading Supplies

Jun 9 Inventories	300.00	Jun 3 Inventories	3 000.00
GST clearing	30.00	GST clearing	300.00
12 Bank	2 970.00		

4101.2 Accounts payable – T Black Ltd

Jun 29 Bank	6 600.00	Jun 7 Equipment	6 000.00
		GST clearing	600.00

4101.3 Accounts payable – ABP Garage

Jun 30 Bank	253.00	Jun 15 Motor vehicle expenses	230.00
		GST clearing	23.00

4102 GST clearing a/c

Jun 3 Accounts payable	300.00	Jun 9 Accounts payable	
– Trading Supplies		– Trading Supplies	30.00
Bank	20.00	22 Bank	7.00
7 Accounts payable			
– T Black Ltd	600.00		
15 Accounts payable			
– ABP Garage	23.00		
16 Bank	400.00		

3103 Bank a/c

Jun 3 Electricity expense	200.00	200.00 Cr
GST clearing	20.00	220.00 Cr
12 Accounts payable		
– Trading Supplies	2 970.00	3 190.00 Cr
16 Inventories	4 000.00	7 190.00 Cr
GST clearing	400.00	7 590.00 Cr
22 Inventories	70.00	7 520.00 Cr
GST clearing	7.00	7 513.00 Cr
29 Accounts payable – T Black Ltd	6 600.00	14 113.00 Cr
30 Accounts payable – ABP Garage	253.00	14 366.00 Cr

3105 Inventories a/c

Jun 3 Accounts payable – Trading Supplies	3 000.00	3 000.00 Dr
9 Accounts payable – Trading Supplies	300.00	2 700.00 Dr
16 Bank	4 000.00	6 700.00 Dr
22 Bank	70.00	6 630.00 Dr

3205 Equipment a/c

Jun 7 Accounts payable – ABP Garage	6 000.00	6 000.00 Dr
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4101.1 Accounts payable – Trading Supplies

Jun 3 Inventories	3 000.00	3 000.00 Cr
GST clearing	300.00	3 300.00 Cr
9 Inventories	300.00	3 000.00 Cr
GST clearing	30.00	2 970.00 Cr
12 Bank	2 970.00	0.00

4101.2 Accounts payable – T Black Ltd

Jun 7 Equipment	6 000.00	6 000.00 Cr
GST clearing	600.00	6 600.00 Cr
29 Bank	6 600.00	0.00

4101.3 Accounts payable – ABP Garage

Jun 15 Motor vehicle expenses	230.00	230.00 Cr
GST clearing	23.00	253.00 Cr
30 Bank	253.00	0.00

4102 GST clearing a/c

Jun 3 Accounts payable – Trading Supplies	300.00	300.00 Dr
Bank	20.00	320.00 Dr
7 Accounts payable – T Black Ltd	600.00	920.00 Dr
9 Accounts payable – Trading Supplies	30.00	890.00 Dr
15 Accounts payable – ABP Garage	23.00	913.00 Dr
16 Bank	400.00	1 313.00 Dr
22 Bank	7.00	1 306.00 Dr

Review & practice 17

Use the information in example 3 (pages 76–8) to complete the following.

- Pencil balance the T-format GST clearing account.
- Take out a trial balance.

► Exercise 1.69, page 125

Alternative treatment for expenditure

Alternative treatments for recording some accounting transactions exist. One such alternative concerns the way in which expenditure is recorded when it is incurred. This alternative treatment of expenditure is technically more correct and is used by many businesses, so it is worthwhile to familiarise yourself with it.

Supplies and services (such as stationery) are purchased for use by the business, and these expenses are then used up over the accounting period. This means that when the payment is initially made for these goods (or services, as the case may be) they could be treated as an asset instead of an expense because they are owned by the business until such time as they are used up. It is at that point – when they are used – that the stationery becomes an expense. Although assets are not used up in the same sense as expense items, in chapter 6 we will study in more detail how other assets are actually treated in a similar manner.

A comparison of the treatment for the initial recording of expenditure is shown below.

2009

Dec 29

Purchased \$880 worth of stationery for cash

Method 1:

Stationery expense	Dr	800	
GST clearing	Dr	80	
Bank	Cr		880

Method 2:

Prepaid stationery	Dr	800	
GST clearing	Dr	80	
Bank	Cr		880

Using method 1, at the end of the accounting period stationery still on hand is recorded as an asset; if using method 2, the amount of stationery used is recorded as an expense. The end result is the same, no matter which method is used.



Sales (supply) of goods and services

Learning objective 3

When a sale is made the business is said to have made a supply of goods to another party. When goods or services are supplied, a registered business must add 10% GST to the value (net amount) of the goods or services to determine the price charged (gross amount).

When sales are recorded, the GST clearing account is credited.

GST and source documents

The source document for a sale is an invoice, which for GST purposes must have the words 'tax invoice' printed on it together with the Australian Business Number of the business making the supply (selling the inventories/goods/service). This document is evidence that a sale has occurred and it is from this source document that entries are made in the accounting records. They will be consecutively numbered by the business issuing them. In this way, invoices can be traced easily in the accounting system.

Sale of inventories

Sales of inventories to customers are made either for cash or on credit terms offered by the business. Sales of inventories are the main source of revenue for a trading business.

The price a business charges for its goods is determined by a number of factors, but principally the concept is that inventories are sold at *cost price plus mark-up*.

The concept of a 100% mark-up is represented as:

$$\begin{array}{rclcl} \text{Cost price} & + & \text{Mark-up} & = & \text{Sale price (value)} \\ \$100 & + & \$100 & = & \$200 \\ & & (100\% \times \$100) & & \end{array}$$

Adding GST to this equation, the actual selling price is determined as:

$$\begin{array}{rclclclcl} \text{Cost price} & + & \text{Mark-up} & = & \text{Sale price} & + & \text{GST 10\%} & = & \text{Actual} \\ & & & & \text{(value)} & & & & \text{selling price} \\ & & & & \text{(net amount)} & & & & \text{(gross amount)} \\ \$100 & + & \$100 & = & \$200 & + & \$20 & = & \$220 \\ & & (100\% \times \$100) & & & & & & \end{array}$$

When sales of inventories are made, two distinct entries (with their respective debits and credits) are made in the accounting records.

The first entry records the *selling price*, including GST. When inventories are sold for cash or on credit, the sales account is credited (revenue increasing) with the net amount (value). The gross amount (price) is debited to either the bank account (asset increasing) or to an accounts receivable account (asset increasing).

The name of the customer is recorded after the words 'accounts receivable'. All accounts receivable accounts are numbered as 3104 to show they are all accounts receivable, but are individualised by adding .1, .2 and so on to each account. This means that the first accounts receivable account is numbered 3104.1, the next 3104.2 and so on.

The second entry records the cost price of the goods being sold. An account called the cost of goods sold account is debited (expense increasing). The inventories account is credited (asset decreasing).

When inventories (goods intended for resale) are purchased by a trading business they are recorded at the cost price as an asset – they are owned by the business. When inventories are sold, this asset is decreased and the value (at its cost price) is transferred to an expense account called 'Cost of goods sold'. The process of 'expensing' the asset (inventories) when items are sold allows for the expense (cost of goods sold) to be offset against the revenue recorded when the sale is made (the selling price recorded in the revenue account – sales). Revenue less expenses represents profit. This concept is studied in detail in Chapter 2. Chapter 5 provides an in-depth study of how cost of goods sold is calculated. In Chapter 1, cost of goods sold will be given whenever a sale of inventories is to be recorded.

Transaction analysis					
Sale of inventories for cash					
July 13	Ashmore Computers sells \$440 worth of inventories for cash.	Bank	A↑ Dr	\$440	
		Sales	R↑ Cr	\$400	← Selling price
		GST clearing	L↑ Cr	\$40	
	The cost of the goods sold was \$200 (CRS)	Cost of goods sold	E↑ Dr	\$200	← Cost price
		Inventories	A↓ Cr	\$200	
CRS = cash register summary					
Sale of inventories on credit					
July 13	Ashmore Computers sells \$220 worth of inventories on credit to T McDade, an accounts receivable.	Accounts receivable	A↑ Dr	\$220	
		Sales	R↑ Cr	\$200	← Selling price
		GST clearing	L↑ Cr	\$20	
	The cost of goods sold for these goods is \$100 (invoice 556)	Cost of goods sold	E↑ Dr	\$100	← Cost price
		Inventories	A↓ Cr	\$100	

Ashmore Computers General journal (extract)						
Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 13	Bank	Dr	3103		440	
	Sales	Cr	1101			400
	SP GST clearing	Cr	4102			40
	(Cash receipt for sales – CRS)					
	Cost of goods sold	Dr	2101		200	
	CP Inventories	Cr	3105			200
	(Sale at cost price)					
	Accounts receivable – T McDade	Dr	3104.1		220	
	SP Sales	Cr	1101			200
	GST clearing	Cr	4102			20
	(Credit sale – I556)					
	Cost of goods sold	Dr	2101		100	
	CP Inventories	Cr	3105			100
	(Sale at cost price)					

Review & practice 18

Journalise the following transactions for Ashmore Computers on 14 July 2009.

- Sold inventories (cost price \$400) for cash \$880 (CRS).
- Sold inventories on credit to Appleby Co. (3104.2) for \$990 (cost price \$450, invoice 557).
- Bateau Bay Electronics (3104.3) purchased inventories on account for \$2 310 (cost price \$1 050, invoice 558).
- Cash customer purchased inventories \$2 090 (cost price \$950, CRS).

► Exercise 1.70, page 125

Although GST is not charged on second-hand goods, when a business disposes of some assets, it is considered a supply and not a transaction.

Sale of assets (other than inventories)

A business may need to sell its assets (other than inventories) such as shop display fittings, furniture and vehicles in certain situations, such as when new assets are purchased or when assets become surplus to the needs of the business. In this chapter, whenever assets (other than inventories) are sold, we assume they are sold at their original cost. In chapter 6 we will consider the implications of selling assets (other than inventories) at a value either above or below their value in the books of the business. Sales of assets require a business to charge GST on the supply.

When assets are sold for cash or on credit:

- the asset account is credited (asset decreasing) with the net amount (value)
- the gross amount (price) is debited to either the bank account (asset increasing) or to an accounts receivable account (asset increasing)
- the amount of GST on the sale (1/11th of the price or 10% of the value) is recorded as a credit to the GST clearing account (liability increasing).

Transaction analysis

Sale of assets for cash

July 15	Ashmore Computers sells some excess furniture for \$550 cash (receipt 221)	Furniture	A↓	Cr		\$500
		Bank	A↑	Dr	\$550	
		GST clearing	L↑	Cr		\$50

Sale of assets on credit

July 15	Ashmore Computers sells some excess furniture for \$5 500 on credit to L Williams (invoice 559)	Furniture	A↓	Cr		\$5 000
		Accounts receivable – L Williams	A↑	Dr	\$5 500	
		GST clearing	L↑	Cr		\$500

Ashmore Computers General journal (extract)

Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 15	Bank	Dr	3103		550	
	Furniture	Cr	3201			500
	GST clearing	Cr	4102			50
	(Cash received for sale of asset – R221)					
	Accounts receivable – L Williams	Dr	3104.4		5 500	
	Furniture	Cr	3201			5 000
	GST clearing	Cr	4102			500
	(Asset sold on credit – I559)					

Review & practice 19

Journalise the following transactions for Ashmore Computers on 16 July 2009.

- a** Sold for cash excess office equipment at its cost price, \$1 804 (receipt 222).
- b** Sold furniture (at cost) that was no longer required to Beachmere Traders Pty Ltd (3104.5) on credit for \$1 199 (invoice 560).

► Exercise 1.71, page 125

Sale of services

The sale of a service rather than a good is the main distinction between a service and a trading business. In the case of Ashmore Computers, both inventories and services are sold. Both are sources of revenue for the business.

When services are sold for cash or credit:

- the service fees revenue account is credited (revenue increasing) with the net amount (value)
- the gross amount (price) is debited either to the bank account (asset increasing) or to an accounts receivable account (asset increasing)
- the amount of GST on the sale (1/11th of the price or 10% of the value) is recorded as a credit to the GST clearing account (liability increasing).

Transaction analysis

Sale of service for cash

July 17	Ashmore Computers serviced a computer for a cash customer for \$220 (cash register docket issued)	Service revenue	R↑	Cr		\$200
		Bank	A↑	Dr	\$220	
		GST clearing	L↑	Cr		\$20

Sale of service on credit

July 17	Ashmore Computers serviced a computer for Texas Pty Ltd, a credit customer, and charged \$440 (invoice 561)	Service revenue	R↑	Cr		\$400
		Accounts receivable – Texas Pty Ltd	A↑	Dr	\$440	
		GST clearing	L↑	Cr		\$40

Ashmore Computers General journal (extract)

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 17	Bank	3103		220	
	Service revenue	1102			200
	GST clearing	4102			20
	(Cash received for sale of service – CRS)				
	Accounts receivable – Texas Pty Ltd	3104.6		440	
	Service revenue	1102			400
	GST clearing	4102			40
	(Credit sale of service – I561)				

Review & practice 20

Journalise the following transactions for Ashmore Computers on 18 July 2009.

- a** Serviced computer for a cash customer \$132 (cash register docket issued).
- b** Serviced computers for credit customer, J J Hill Ltd (3104.7), and charged \$1 100 to the account (invoice 562).
- c** Cash services performed and cash register dockets issued for a total of \$3 300.
- d** Performed service on computers for Black Pty Ltd (3104.8) and invoiced \$2 200 (invoice 563).

► Exercises 1.72 and 1.73, pages 125–6

✓ Helpful hints

- Cost of goods sold is recorded only when inventories are sold (not services or other assets). The amount is generally calculated using various costing methods but in this chapter the figure is provided for you.
- Cost of goods sold in a service industry is called supplies expense, and is recorded when expenses are incurred as part of providing the service.

Sales returns and allowances

If customers buy goods and find they have defects, are unsuitable or have been damaged in getting to their location, they may return the goods. However, sometimes damaged items may not be returned. Instead, an allowance is made on the price originally charged as an acknowledgment that inferior goods have been supplied. The same applies if the customer has been overcharged for goods. In this text, for simplicity, sales returns will assume goods returned are not damaged and can be resold.

GST and source documents

The source document that verifies a credit sales return or credit allowance is called an adjustment note. It is necessary to adjust the GST recorded on the tax invoice prepared when the original sale was made.

Sales returns (cash and credit)

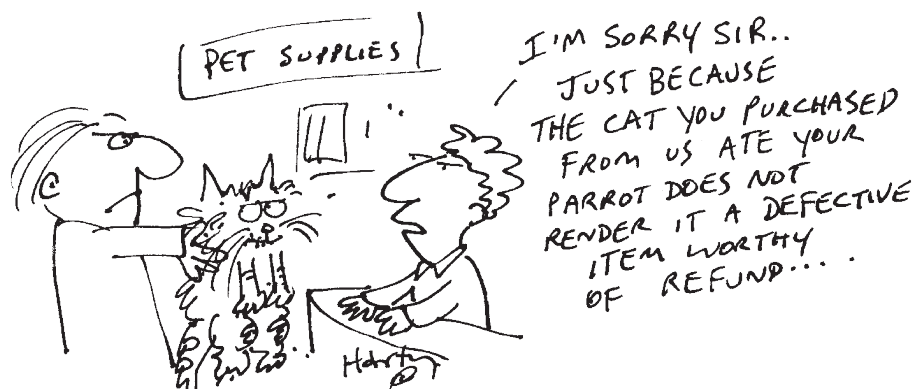
An adjustment note has the effect of reversing all or part of the amount on the original tax invoice. If inventories sold for cash or credit are returned:

- sales returns are debited (negative revenue increasing). This account records the value of the sale being reversed
- inventories (asset increasing) is debited because the items are returned to stock for resale
- the gross amount (price) of the sales return is credited to either the bank account (asset decreasing) or to an accounts receivable account (asset decreasing)

Assume all figures given are inclusive of GST unless stated otherwise.

Calculate the GST component by dividing the sale price by 11.

- the amount of GST on the sales return (1/11th of the price or 10% of the value) is recorded as a debit to the GST clearing account (liability decreasing) because this amount is no longer owing to the ATO and will therefore decrease the business's total GST liability
- cost of goods sold (expense decreasing) is credited to reverse the entry made when the sale (at cost price) was recorded.



Transaction analysis

Sales returns – cash refund

July 19 A cash customer returns \$33 worth of damaged goods to Ashmore Computers. The cost of the goods being returned is \$15 (cheque 687)

Sales returns	–R↑	Dr	\$30	
Bank	A↓	Cr		\$33
GST clearing	L↓	Dr	\$3	
Inventories	A↑	Dr	\$15	
Cost of goods sold	E↓	Cr		\$15

Sales returns – credit

A credit customer, T McDade, returns goods to the value of \$44. The cost of goods sold for these goods was \$20 (adjustment note 13)

Sales returns	–R↑	Dr	\$40	
Accounts receivable – T McDade	A↓	Cr		\$44
GST clearing	L↓	Dr	\$4	
Inventories	A↑	Dr	\$20	
Cost of goods sold	E↓	Cr		\$20

Ashmore Computers General journal (extract)

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 19	Sales returns	1101A		30	
	GST clearing	4102		3	
	Bank	3103			33
	(Cash payment for sales returns at selling price – CH687)				
	Inventories	3105		15	
	Cost of goods sold	2101			15
	(Sale returns at cost price)				
	Sales returns	1101A		40	
	GST clearing	4102		4	
	Accounts receivable – T McDade	3104.1			44
	(Sales returns at selling price – A13)				
	Inventories	3105		20	
	Cost of goods sold	2101			20
	(Sales returns at cost price)				

A negative revenue account is opposite to a revenue account and has a debit nature.

Review & practice 21

Journalise the following transactions for Ashmore Computers on 20 July 2009.

- a Inventories sold for cash on 14 July for \$220 (cost price \$100) were returned (cheque 688).
- b Appleby Co. (3104.2) returned inventories bought on credit worth \$330 on 14 July (cost price \$150, adjustment note 15).

► Exercise 1.74, page 126

Cash received from accounts receivable

Accounts receivable are also known as debtors.

Generally, at the end of the month, debtors settle the outstanding balances of accounts. This means the amount owing by accounts receivable is received. Sometimes the full amount owing is received and sometimes a part-payment is made by the debtor.

When a cheque (or cash) is received from an accounts receivable:

- the bank account is debited (asset increasing)
- the accounts receivable account is credited (asset decreasing).

Transaction analysis

Cash received from accounts receivable – discount given

July 23	Ashmore Computers receives \$1 100 from J J Hill Ltd, being payment of the account (receipt 226)	Bank	A↑	Dr	\$1 100
		Accounts receivable – J J Hill Ltd	A↓	Cr	\$1 100

Ashmore Computers General journal (extract)

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 21	Bank	Dr 3103		1 100	
	Accounts receivable – J J Hill Ltd	Cr 3104.7			1 100
	(Cash received from accounts receivable – R226)				

Review & practice 22

Journalise the following transactions for Ashmore Computers on 22 and 23 July 2009.

- a July 22 Bateau Bay Electrics paid \$2 310 in payment of their account (receipt 224), and Beachmere Traders Pty Ltd paid \$1 200 owing (receipt 225).
- b July 23 Ashmore Computers receives \$2 200 from Black Pty Ltd (receipt 227).

► Exercises 1.75 and 1.76, page 126

Interest received is called an input taxed supply, as it is a supply made by a financial institution that can claim GST credits on any goods/services it purchases but cannot charge GST on its supplies.

Transaction analysis

Cash received for other revenues

When a cheque (or cash) is received from a source other than an accounts receivable, the bank account is debited (asset increasing). The other account will record the revenue that is being received and will be credited (revenue increasing).

Generally, GST is included in amounts received for other revenues such as rent revenue (where rent is for commercial premises) and commission revenue. When interest is received, GST is not included because interest is classified as a 'financial supply' and GST is not added to financial supplies. Similarly, GST is not payable on dividends received from investments.

Any cash received is evidenced by a receipt, which can take many forms. These will be discussed in more detail in chapter 3.

Cash received for other revenues

July 23	Ashmore Computers has sublet its business premises and receives a cheque from a tenant for rental revenue \$330 (receipt 228)	Bank	A↑	Dr	\$330	
		Rent revenue	R↑	Cr		\$300
		GST clearing	L↑	Cr		\$30

Ashmore Computers General journal (extract)						
Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Jul 23	Bank	Dr	3103		330	
	Rent revenue	Cr	1106			300
	GST clearing	Cr	4102			30
	(Cash received for rent – R228)					



Review & practice **23**

Journalise the following transactions for Ashmore Computers on 24 July 2009.

- a Ashmore Computers received interest on an investment \$400 (receipt 229). GST is not applicable in this transaction.
- b Ashmore Computers issued receipt 230 to record a cheque for \$550 received from Aspley Drycleaners for agent's commission.

► Exercise 1.77, page 126

**EXAMPLE 4**

Consolidation of sales of inventories, assets and services for cash and on credit, and returns of inventories; cash received from accounts receivable and cash received for other revenue

Barcaldine Computers had the following transactions for the month of August 2009. (Use the chart of accounts inside the front cover of this textbook.)

- Aug 1 Purchased \$22 000 worth of inventories for cash (cheque 009)
- 2 Cash sales of \$1 320 worth of inventories (cost price \$600) CRS
- 3 Owner contributed furniture worth \$30 000 (memo 3/8/2009)
- 4 Tenant paid rent \$517 (receipt 531)
- 5 Sold inventories to Blackall College for \$17 160 (cost price \$7 800) (invoice 7774)
- 8 Stella Pty Ltd purchased inventories for \$15 400 on credit (cost price \$7 000, invoice 7775)
- 19 Serviced computers on account for West SHS and charged \$1 210 for this service (invoice 7776)
- 21 Sold furniture (at cost) \$26 400 on credit to Inland Traders (invoice 7777)
- 24 Received a cheque from Blackall College for \$17 160 in settlement of their account (receipt 532)
- 30 Stella Pty Ltd returned \$1 892 worth of inventories (adjustment note 82, cost price \$860)

The general journal and general ledger (extract) for Barcaldine Computers would appear as shown on pages 89–91.



Barcaldine Computers General journal						
Date 2009	Particulars		Account no.	Post ref	Debit \$	Credit \$
Aug 1	Inventories	Dr	3105	✓	20 000	
	GST clearing	Dr	4102	✓	2 000	
	Bank	Cr	3103	✓		22 000
	(Cash purchase – CH009)					
2	Bank	Dr	3103	✓	1 320	
	Sales	Cr	1101	✓		1 200
	GST clearing	Cr	4102	✓		120
	(Cash sales – CRS)					
	Cost of goods sold	Dr	2101	✓	600	
	Inventories	Cr	3105	✓		600
	(Sale at cost price)					
3	Furniture	Dr	3201	✓	30 000	
	Capital	Cr	5101	✓		30 000
	(Owner's contribution – memo 3/8/09)					
4	Bank	Dr	3103	✓	517	
	Rent revenue	Cr	1106	✓		470
	GST clearing	Cr	4102	✓		47
	(Cash for rent – R531)					
5	Accounts receivable – Blackall College	Dr	3104.1	✓	17 160	
	Sales	Cr	1101	✓		15 600
	GST clearing	Cr	4102	✓		1 560
	(Credit sale – I7774)					
	Cost of goods sold	Dr	2101	✓	7 800	
	Inventories	Cr	3105	✓		7 800
	(Sale at cost price)					
8	Accounts receivable – Stella Pty Ltd	Dr	3104.2	✓	15 400	
	Sales	Cr	1101	✓		14 000
	GST clearing	Cr	4102	✓		1 400
	(Credit sale – I7775)					
	Cost of goods sold	Dr	2101	✓	7 000	
	Inventories	Cr	3105	✓		7 000
	(Sale at cost price)					
19	Accounts receivable – West SHS	Dr	3104.3	✓	1 210	
	Service revenue	Cr	1102	✓		1 100
	GST clearing	Cr	4102	✓		110
	(Credit sale – I7776)					
21	Accounts receivable – Inland Traders	Dr	3104.4	✓	26 400	
	Furniture	Cr	3201	✓		24 000
	GST clearing	Cr	4102	✓		2 400
	(Credit sale – I7777)					
24	Bank	Dr	3103	✓	17 160	
	Accounts receivable – Blackall College	Cr	3104.1	✓		17 160
	(Cash from debtor – R532)					
30	Sales returns	Dr	1101A	✓	1 720	
	GST clearing	Dr	4102	✓	172	
	Accounts receivable – Stella Pty Ltd	Cr	3104.5	✓		1 892
	(Credit sales returns A82)					
	Inventories	Dr	3105	✓	860	
	Cost of goods sold	Cr	2101	✓		860
	(Sales returns at cost price)					



Barcaldine Computers
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
1101	Sales a/c				
			Aug 2	Bank	1 200
			5	Accounts receivable – Blackall College	15 600
			8	Accounts receivable – Stella Pty Ltd	14 000
1101A	Sales returns a/c				
Aug 30	Accounts receivable – Stella Pty Ltd	1 720			
1102	Service revenue a/c				
			Aug 19	Accounts receivable – West SHS	1 100
1106	Rent revenue a/c				
			Aug 4	Bank	470
2101	Cost of goods sold a/c				
Aug 2	Inventories	600	Aug 30	Inventories	860
5	Inventories	7 800			
8	Inventories	7 000			
3103	Bank a/c				
Aug 2	Sales	1 200	Aug 1	Inventories	20 000
	GST clearing	120		GST clearing	2 000
4	Rent revenue	470			
	GST clearing	47			
24	Accounts receivable – Blackall College	16 302			
3104.1	Accounts receivable – Blackall College				
Aug 5	Sales	15 600	Aug 24	Bank	17 160
	GST clearing	1 560			
3104.2	Accounts receivable – Stella Pty Ltd				
Aug 8	Sales revenue	14 000	Aug 30	Sales returns	1 720
	GST clearing	1 400		GST clearing	172
3104.3	Accounts receivable – West SHS				
Aug 19	Service revenue	1 100			
	GST clearing	110			

Barcaldine Computers
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
1101	Sales a/c			
Aug 2	Bank		1 200	1 200 Cr
5	Accounts receivable – Blackall College	15 600		16 800 Cr
8	Accounts receivable – Stella Pty Ltd	14 000		30 800 Cr
1101A	Sales returns a/c			
Aug 30	Accounts receivable – Stella Pty Ltd	1 720		1 720 Dr
1102	Service revenue a/c			
Aug 19	Accounts receivable – West SHS		1 100	1 100 Cr
1106	Rent revenue a/c			
Aug 4	Bank		470	470 Cr
2101	Cost of goods sold a/c			
Aug 2	Inventories	600		600 Dr
5	Inventories	7 800		8 400 Dr
8	Inventories	7 000		15 400 Dr
30	Inventories		860	14 540 Dr
3103	Bank a/c			
Aug 1	Inventories		20 000	20 000 Cr
	GST clearing		2 000	22 000 Cr
2	Sales	1 200		20 800 Cr
	GST clearing	120		20 680 Cr
4	Rent revenue	470		20 210 Cr
	GST clearing	47		20 163 Cr
24	Accounts receivable – Blackall College	17 160		3 003 Cr
3104.1	Accounts receivable – Blackall College			
Aug 5	Sales	15 600		15 600 Dr
	GST clearing	1 560		17 160 Dr
24	Bank		17 160	0
3104.2	Accounts receivable – Stella Pty Ltd			
Aug 8	Sales	14 000		14 000 Dr
	GST clearing	1 400		15 400 Dr
30	Sales returns		1 720	13 680 Dr
	GST clearing		172	13 508 Dr
3104.3	Accounts receivable – West SHS			
Aug 19	Service revenue	1 100		1 100 Dr
	GST clearing	110		1 210 Dr



Barcaldine Computers General ledger (extract) – T-format						Barcaldine Computers General ledger (extract) – columnar format				
Dr					Cr					
Date	Particulars	Amount	Date	Particulars	Amount	Date	Particulars	Debit	Credit	Balance
		\$			\$			\$	\$	\$
2009			2009			2009				
3104.4	Accounts receivable – Inland Traders					3104.4 Accounts receivable – Inland Traders				
Aug 21	Furniture	24 000				Aug 21	Furniture	24 000		24 000 Dr
	GST clearing	2 400					GST clearing	2 400		26 400 Dr
3105	Inventories a/c					3105 Inventories a/c				
Aug 1	Bank	20 000	Aug 2	Cost of goods sold	600	Aug 1	Bank	20 000		20 000 Dr
30	Cost of goods sold	860	5	Cost of goods sold	7 800	2	Cost of goods sold		600	19 400 Dr
			8	Cost of goods sold	7 000	5	Cost of goods sold		7 800	11 600 Dr
						8	Cost of goods sold		7 000	4 600 Dr
						30	Cost of goods sold	860		5 460 Dr
3201	Furniture a/c					3201 Furniture a/c				
Aug 3	Capital	30 000	Aug 21	Accounts receivable – Inland Traders	24 000	Aug 3	Capital		30 000	30 000 Dr
						21	Accounts receivable – Inland Traders		24 000	6 000 Dr
4102	GST clearing a/c					4102 GST clearing a/c				
Aug 1	Bank	2 000	Aug 2	Bank	120	Aug 1	Bank	2 000		2 000 Dr
30	Accounts receivable – Stella Pty Ltd	172	4	Bank	47	2	Bank		120	1 880 Dr
			5	Accounts receivable – Blackall College	1 560	4	Bank		47	1 833 Dr
			8	Accounts receivable – Stella Pty Ltd	1 400	5	Accounts receivable – Blackall College		1 560	273 Dr
			19	Accounts receivable – West SHS	110	8	Accounts receivable – Stella Pty Ltd		1 400	1 127 Cr
			21	Accounts receivable – Inland Traders	2 400	19	Accounts receivable – West SHS		110	1 237 Cr
						21	Accounts receivable – Inland Traders		2 400	3 637 Cr
5101	Capital a/c					30	Accounts receivable – Stella Pty Ltd	172		3 465 Cr
			Aug 3	Furniture	30 000	5101 Capital a/c				
						Aug 3	Furniture		30 000	30 000 Cr

► Exercises 1.78 and 1.79, page 127

Withdrawals by the owner (drawings)

Learning objective 4

As owners are the proprietors of their business, they have the right to withdraw cash, inventories or goods from the business for their own use. A withdrawal by the owner of any of the business assets is recorded in an account called drawings. The drawings account is a negative owner's equity account that is debit in nature because it has the effect of decreasing the capital account. Drawings are often made by the owner in anticipation of profits. The owner is entitled to withdraw these profits as a return on the investment of their capital in the business.

GST and source documents

A memo, an email or even a rough note might verify the transaction and record the GST when goods are withdrawn from the business by the owner. When cash is withdrawn, a verifiable document (a cheque) provides the necessary evidence of the transaction. The owner would sign or initial the receipt of cash or inventory.

Drawings of cash

Recall that when the owner withdraws cash, the drawings account is debited (negative owner's equity increasing) and the asset account (cash or inventories) is credited (asset decreasing).

Transaction analysis

Drawings of cash and other assets (not inventories)

July 30	Zac Heliopolis, owner of Ashmore Computers, withdrew cash of \$500 (cheque 828)	Bank Drawings	A↓ -Oe↑	Cr Dr \$500	\$500
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Ashmore Computers General journal (extract)

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 30	Drawings Bank (Cash payment to owner – CH828)	5101A 3103		500	500

Drawings of inventories

When the owner withdraws inventories for his or her own use, the drawings account is debited (negative owner's equity increasing) with the gross amount (cost price + GST) and the inventories account is credited (asset decreasing) with the net amount.

The GST recorded as an input tax credit when the goods were purchased must be adjusted. The owner in this case becomes the consumer and therefore should pay the GST on these inventories. If the business had continued to hold the inventories, then the GST paid on them would have been included as an input tax credit. The GST clearing account is credited (liability increasing) and the drawings account is debited (negative owner's equity increasing) with the GST adjustment.

Drawings of inventories

July 30	Zac withdraws \$55 (cost price + GST) worth of inventories (memo 29/7/09)	Drawings Inventories GST clearing	-Oe↑ A↓ L↑	Dr Cr Cr	\$55 \$50 \$5
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Ashmore Computers General journal (extract)

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 30	Drawings Inventories GST clearing (Withdrawal of goods for own use – memo 29/7/2009)	5101A 3105 4102		55	50 5

When the owner withdraws inventories, no sale has occurred so sales and COGS are not affected.

Review & practice 24

Journalise the following transactions for Ashmore Computers on 31 July 2009.

- a The owner withdrew cash of \$2 000 (cheque 829).
- b The owner withdrew for own use goods with a purchase value of \$3 300 (including GST) (memo 30/7/2009).

► Exercise 1.80, page 128

Correction of errors

Learning objective 5 Inadvertently, errors in the processing of accounting information will occur from time to time. When an error is found, it is standard practice to record a general journal entry to correct the error. There are a number of methods that can be used to correct errors. Many are acceptable, but the preferred method – especially in computerised accounting systems – is the reversal/re-entry method.

GST and source documents

A variety of sources will provide the documentary evidence that an error has occurred and requires a correction entry to be entered in the accounting records. An error that involves a third party may be brought to the attention of the business through email, fax or letter. An internal error may be evidenced by an inter-office memorandum. The size of a business will often determine the formality of such documents, but entries are not made in the accounting records without some form of verifiable documentary evidence. This is particularly important where errors are concerned. Evidence is held for audit purposes and to protect honest employees who could otherwise be accused of falsifying records for their own gain.

An audit is an independent check of the accounting records by a qualified accountant who specialises in auditing.

Reversal and re-entry method

This method of correcting errors is to reverse the original entry and re-enter the information correctly. This method is advantageous as it is easy to trace for audit purposes and eliminates the compounding errors that can occur when other methods are used. Consider the following entry recorded in a previous month.

Ashmore Computers General journal (extract)

	Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Original entry	Mar 9	Rent	2419		200	
		GST clearing	4102		20	
		Bank	3103			220
		(Cash payment for rent – CH650)				

Transaction analysis

The original entry on page 93 is not repeated in the records but is shown to consider what will be required in the reversal

Correction of errors – reversal and re-entry

July 29	In reviewing the accounting records for Ashmore Computers it is revealed that during March \$220 was incorrectly recorded in the rent account, instead of the electricity account. A cheque for this amount has been sent to the wrong party and a letter has been received to alert Ashmore Computers to the error (letter received 29/6/2009)	<i>Reversal of original entry:</i>			
		Bank	A↑	Dr	\$220
		Rent	E↓	Cr	\$200
		GST clearing	L↑	Cr	\$20
		<i>Re-entry – corrected:</i>			
		Bank	A↓	Cr	\$220
		Electricity	E↑	Dr	\$200
		GST clearing	L↓	Dr	\$20

**Ashmore Computers
General journal (extract)**

Reversal entry

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 29	Bank	3103		220	
	Rent	2419			200
	GST clearing	4102			20
	(Reversal of incorrect entry 9 March; cancellation of CH650)				

The effect of the reversal entry is that it cancels out the original entry. The evidence of the reversal is clear to anyone who needs to check that the records are accurate. It ensures that the correct information is entered into the general journal. In this case, the correct information is that the expense recorded was supposed to be electricity.

**Ashmore Computers
General journal (extract)**

Re-entry

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 29	Electricity	2409		200	
	GST clearing	4102		20	
	Bank	3103			220
	(Cash payment for electricity – CH818)				

Review & practice 25

Journalise the following transactions for Ashmore Computers on 30 June 2009.

- a In reviewing the accounting records for the business, it is found that a net amount of \$1 200 has been incorrectly posted to the advertising account on 19 May, instead of the showroom expenses account. This error must be corrected.
- b S Tonkin (3104.9), an account receivable, has been debited with a sale of inventories for \$517. (Cost price was recorded as \$220.) This was in fact an incorrect entry. S Tonkin is an accounts payable (4101.14) and the amount should have been recorded as a purchase of inventories for \$517. This transaction must be reversed and corrected.

Opening entry for a beginning business versus a continuing business

Learning objective 6 Recall that earlier in this chapter we prepared entries in the general journal when the owner began the business. This is called an opening entry. It has the effect of bringing into existence in the accounting records the assets, liabilities and owner's equity of the business.



Beginning business – opening entry

An opening entry is completed only when a business begins its accounting records. This entry records the assets, the liabilities and an amount represented by the owner's investment in the business, the amount of capital. This entry reflects the accounting equation $A - L = Oe$ and its purpose is to bring the assets, liabilities and owner's equity into existence in the accounting records.

For example, Catrin Charles-Edwards begins her business, an art supplies shop, Catrin's Art Supplies. Her contribution to the business is her savings of \$15 000 and a loan of \$10 000 cash from the CBA Bank. Therefore, her assets are cash \$15 000 + \$10 000 and her liabilities are a loan of \$10 000. Her equity in the business is $(A - L = Oe)$ $\$25\,000 - \$10\,000 = \$15\,000$. This \$15 000 represents the cash that Catrin contributed to begin the business. The business owes this amount to her at some time in the future when it is either sold or liquidated.

Transaction analysis

GST does not affect this transaction

Opening entry

July 1	Catrin Charles-Edwards begins her business, Catrin's Art Supplies. Her contribution to the business is her savings of \$15 000 and a bank loan for \$10 000.	Bank	A↑	Dr	\$25 000
		Loan from CBA	L↑	Cr	\$10 000
		Capital	Oe↑	Cr	\$15 000

Catrin's Art Supplies General journal (extract)

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 1	Bank	3103		25 000	
	Loan from CBA Bank	4201			10 000
	Capital	5101			15 000
	(Owner contributes asset and liability to begin the business)				

The effect of this general journal entry in the ledger of Catrin's records is shown on the following page. Note that the word 'capital' is written in the particulars column with the cash and the loan. This indicates that these have been contributed on the opening of the business.

Catrin's Art Supplies General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
3103	Bank a/c				
Jul 1	Capital	25 000			
4201	Loan from CBA Bank a/c				
			Jul 1	Capital	10 000
5101	Capital a/c – Catrin Charles-Edwards				
			Jul 1	Sundry accounts	15 000

Catrin's Art Supplies General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
3103 Bank a/c				
Jul 1	Capital	25 000		25 000 Dr
4201 Loan from CBA Bank a/c				
Jul 1	Capital		10 000	10 000 Cr
5101 Capital a/c – Catrin Charles-Edwards				
Jul 1	Sundry accounts		15 000	15 000 Cr

Continuing business – no opening entry

When accounting for a continuing business (a business that already has ledger accounts in existence), we acknowledge any previous entries in the general ledger with the word 'balance' in the particulars column. The balances of each ledger account are entered straight into the general ledger – *no general journal entries are made*.

The difference between the value of the assets and the liabilities is recorded as a balance in the capital account. The accounting equation is used to work out this difference, which is the value of the owner's equity. You should use the $Oe = A - L$ version of the accounting equation, because it shows the owner's equity as the unknown value.

In the T-format general ledger, the letters b/d, short for brought down, are used after the balance in the particulars column. This follows the convention used when accounts in this form of general ledger are formally balanced off. Accounts that are presented in the three-column format are not balanced off.

Consider Catrin's Art Supplies, which has the following assets and liabilities on 1 July 2009: cash \$25 000 and loan from CBA Bank \$10 000. As no general journal entry is necessary for a continuing business, the following information is entered into the general ledger as balances and the amount of capital is calculated using the accounting equation $Oe = A - L$. Therefore, capital is valued at $\$15\,000 = \$25\,000 - \$10\,000$.

Catrin's Art Supplies General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
3103	Bank a/c				
Jul 1	Balance b/d	25 000			
4201	Loan from CBA Bank a/c				
			Jul 1	Balance b/d	10 000
5101	Capital a/c – Catrin Charles-Edwards				
			Jul 1	Balance b/d	15 000

Catrin's Art Supplies General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
3103 Bank a/c				
Jul 1	Balance			25 000 Dr
4201 Loan from CBA Bank a/c				
Jul 1	Balance			10 000 Cr
5101 Capital a/c – Catrin Charles-Edwards				
Jul 1	Balance			15 000 Cr

Review & practice 26

- a** Appleby Road Computers is owned by Jonathon Smythe, a sole trader. Jonathon has registered his business name and opened a bank account in the name of his business. Jonathon lists the following as his contribution to the business on 10 January: equipment \$12 500, office furniture \$2 000 and cash \$15 000.
Prepare an opening entry for Appleby Road Computers.
- b** Jacob Lourdes began business on 1 February with the following assets and liabilities: cash on hand \$1 000, inventories \$150 000, display furniture \$39 000, premises \$200 000, bank overdraft \$50 000 and mortgage over premises \$175 000.
 - i** What is the value of Jacob's investment in the business?
 - ii** Prepare an opening entry for Lourdes Trading.

► Exercise 1.83, page 128

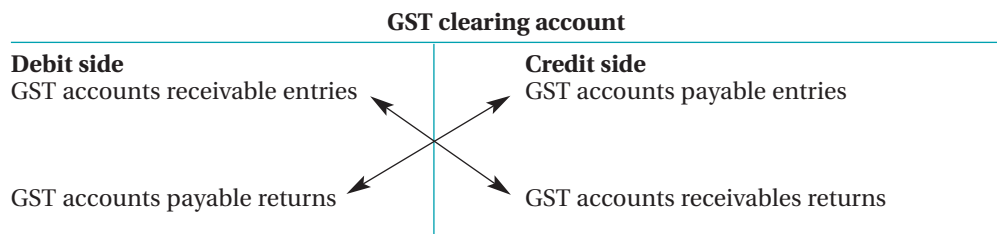
Payment of GST to the Australian Taxation Office

A business must remit the amount of GST to the ATO on a regular basis – monthly, quarterly or annually. A Business Activity Statement must be submitted either monthly or quarterly. The BAS details the total sales and purchases made by the business and helps to calculate the amount of GST owing by the business to the ATO or by the ATO to the business.

If GST were remitted to the ATO on a monthly basis, then the amount owing (if the GST collected is greater than the GST paid) each month would be the previous month's calculation.

For simplicity, in this chapter we have used the GST clearing account to record all the GST paid to other businesses and all the GST collected from customers. Many businesses using computerised records would record these amounts in separate accounts (as discussed on page 63) and enter these into their BAS without amendment. (If recording manually, a business is more likely to use the specialised journals that will be discussed in chapter 4. In specialised journals, a column is allocated to the amount of GST paid or collected.)

The balance of the GST clearing account is the same as the net amount that would be calculated if GST were recorded in two accounts. The totals of the debit and credit sides of the clearing account, however, would not be identical to the credit side of the GST collected (payable) account and the debit side of the GST paid (receivable) account, respectively. The reason for this difference is due to adjustments such as returns. When one account is used, the amount is recorded as a positive amount on the opposite side of the clearing account rather than as a negative to the same side as would be the net effect if two separate accounts were used and balances for each were found. The overall result is the same using either method.



Therefore, when it is time to complete the BAS and submit the balance of the GST clearing account to the ATO, all accounts receivable items need to be identified and totalled and all accounts payable items need to be identified and totalled. The balance is the amount paid.

When the amount owing to the ATO is determined from the previous month's transactions, an entry is made to record the payment to the ATO:

Transaction analysis

Payment of GST to the ATO

July 30	Zac Heliopolis, owner of Ashmore Computers, pays \$2 300 GST to the ATO (cheque 829)	GST clearing Bank	L↓ A↓	Dr Cr	\$2 300 \$2 300
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Ashmore Computers
General journal (extract)

Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2009					
Jul 30	GST clearing Bank (GST owing paid to ATO – CH829)	4102 3103		2 300	2 300

This is the more likely occurrence for a business, but should a situation arise where GST collected on sales is less than the GST paid on purchases and other business expenses, then the reverse entry would be made. In that situation, the ATO would owe the business the difference between the two amounts.

Review & practice 27

- a** Prepare the entry to record the remittance of \$3 587 of GST to the ATO by Fair Dinkum Painting on 20 April 2009.
- b** Reagan Best's business, Best Travelware, had the following entries in its GST clearing account. Determine the amount owing to the ATO for the month of September 2009 and prepare the entry in the general journal on 20 October 2009.



4102**GST clearing a/c**

Sept 3	Bank	420	Sept 1	Bank	150
6	Bank	250	6	Accounts receivable	
8	Bank	110		– Arens Ltd	540
9	Accounts payable		9	Bank	1 254
	– Austral Suppliers Ltd	660	11	Accounts receivable	
14	Accounts payable			– Batten Co. Ltd	1 154
	– GHK Ltd	841	14	Accounts receivable	
16	Accounts payable			– Hoopers Pty Ltd	112
	– All Stars Ltd	70	15	Bank	654
19	Bank	66	16	Accounts payable	
23	Accounts receivable			– GHK Ltd	254
	– Arens Ltd	114	20	Bank	665
28	Accounts payable		26	Bank	120
	– Harper Copiers Ltd	48	29	Bank	1 147

► Exercises 1.84 and 1.85, page 128

Concluding summary of transactions

Recap the transactions covered in this chapter by using the summary in [1.25] and then work through the comprehensive example that follows.

[1.25]**Recap of transactions**

Purchase of inventories	Dr Inventories Dr GST clearing Cr Bank/accounts payable	Sale of inventories – selling price	Dr Bank/accounts receivable Cr Sales Cr GST clearing
Purchases returns and allowances	Dr Bank/accounts payable Cr Inventories Cr GST clearing	Sale of inventories – cost price	Dr Cost of goods sold Cr Inventories
Purchase of assets	Dr Asset Dr GST clearing Cr Bank/accounts payable	Sale of assets	Dr Bank/accounts receivable Cr Asset Cr GST clearing
Purchase of asset with deposit paid	Dr Asset Dr GST clearing Cr Accounts payable Dr Accounts payable Cr Bank	Sale of service	Dr Bank/accounts receivable Cr Service fees revenue Cr GST clearing
Purchase of supplies/services	Dr Expense Dr GST clearing Cr Bank/accounts payable	Sales returns – selling price	Dr Sales returns Dr GST clearing Cr Bank/accounts receivable
Cash paid to accounts payable	Dr Accounts payable Cr Bank	Sales returns – cost price	Dr Inventories Cr Cost of goods sold
		Cash received – accounts receivable	Dr Bank Cr Accounts receivable

Recap of transactions *continued*

Cash received for revenues	Dr Bank Cr Revenue Cr GST clearing	Owner makes a further contribution of assets (no GST)	Dr Assets Cr Capital
Drawings – cash (no GST)	Dr Drawings Cr Bank	Borrowing from bank/other lending source (no GST)	Dr Bank Cr Loan, bank/other
Drawings – inventories (cost price)	Dr Drawings Cr Inventories Cr GST clearing	Payment of GST owing to ATO	Dr GST clearing Cr Bank
Opening entry – beginning business only (Oe = A – L)	Dr Assets Cr Liabilities Cr Owner's equity	Receipt of GST owing from ATO	Dr Bank Cr GST clearing

EXAMPLE 5**A comprehensive example**

Journalise the following transactions for Ballandean Computers, post to the general ledger and take out a trial balance as at 30 September 2009.

2009

- Sep 1 Margie Reed, proprietor of Ballandean Computers, reports that her business has the following assets and liabilities as at this date: bank \$34 500, accounts receivable – I Isaacs (3104.1) \$2 200, inventories \$14 000, furniture \$23 000, accounts payable – J Altona (4101.1) \$13 200, GST clearing \$1 000 (credit balance) and loan from Bank of Queensland \$30 000
- Purchased inventories valued at \$5 456 on credit from Bedourie Suppliers (received invoice 22133)
- 2 Sold inventories on credit to Davo's of Dalby \$1 199 (cost price \$545) (invoice 9981)
- 4 I Isaacs, debtor, paid full amount owing (receipt 60)
- 5 Sold services on credit to F Roberts \$341 on credit (invoice 9982)
- 9 Returned goods to Bedourie Suppliers and received adjustment note ref # 552 for \$451
- 11 Metro Sales sold Ballandean Computers a motor vehicle on credit for \$33 000. Terms were 20% deposit and the remainder in one month's time (cheque 44532; ref # 88765)
- 13 Purchased office supplies \$814 on credit from Office Wonders (invoice OW2223)
- 14 Cash sales of inventories \$1 826 (cost price \$830, CRS)
- 16 Sold goods on credit to T & B Healy for \$3 300 (cost price \$1 500) (invoice 9983)
- Paid cash for advertising \$1 045 (cheque 44533)
- Paid wages \$2 400 (cheque 44534)
- 17 Sent cheque for \$5 000 in part-payment to J Altona (cheque 44535)
- 19 Davo's of Dalby returned \$88 worth of goods that were surplus to requirements (cost price \$40, adjustment note 025)
- 22 Wrote cheque 44536 to pay Bedourie Suppliers
- Sold furniture that was excess to requirements for \$1 100 on credit to Gerard Industries (invoice 9984)



- 25 Received a cheque from T & B Healy for \$3 300 (receipt 61)
- 26 Received commission from sales of Compaq products \$440 (receipt 62)
The cash sales of inventories on 14 September for \$1 826 (cost price \$830) had been entered incorrectly. The figure was actually \$5 126 and the cost price of the goods sold was \$2 330, memo dated 24/9/2009)
- 29 The owner, Margie Reed, withdrew cash of \$4 000 and goods with a cost price of \$220 for her own use (cheque 44537; memo 29/9/2009)

**Ballandean Computers
General journal**

Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Sep 1	Inventories	Dr 3105		4 960	
	GST clearing	Dr 4102		496	
	Accounts payable – Bedourie Suppliers	Cr 4101.2			5 456
	(Credit purchase – ref # 22133)	Cr			
2	Accounts receivable – Davo's of Dalby	Dr 3104.2		1 199	
	Sales	Cr 1101			1 090
	GST clearing	Cr 4102			109
	(Credit sale – I9981)				
	Cost of goods sold	Dr 2101		545	
	Inventories	Cr 3105			545
	(Sale at cost price)				
4	Bank	Dr 3103		2 200	
	Accounts receivable – I Isaacs	Cr 3104.1			2 200
	(Cash received – R60)				
5	Accounts receivable – F Roberts	Dr 3104.3		341	
	Service revenue	Cr 1102			310
	GST clearing	Cr 4102			31
	(Credit sale – service – I9982)				
9	Accounts payable – Bedouire Suppliers	Dr 4101.2		451	
	Inventories	Cr 3105			410
	GST clearing	Cr 4102			41
	(Credit purchase return – ref # 552)				
11	Motor vehicle	Dr 3204		30 000	
	GST clearing	Dr 4102		3 000	
	Accounts payable – Metro Sales	Cr 4101.3			33 000
	(Credit purchase of asset – ref # 88765)				
	Accounts payable – Metro Sales	Dr 4101.3		6 600	
	Bank	Cr 3103			6 600
	(Paid deposit of cash – CH44532)				
13	Office expenses	Dr 2413		740	
	GST clearing	Dr 4102		74	
	Accounts payable – Office Wonders	Cr 4101.4			814
	(Credit purchase of supplies – ref # OW2223)				
14	Bank	Dr 3103		1 826	
	Sales	Cr 1101			1 660
	GST clearing	Cr 4102			166
	(Cash sale of inventories – CRS)				



Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
	Cost of goods sold	Dr 2101		830	
	Inventories	Cr 3105			830
	(Sale at cost price)				
16	Accounts receivable – T & B Healy	Dr 3104.4		3 300	
	Sales	Cr 1101			3 000
	GST clearing	Cr 4102			300
	(Credit sale – I9983)				
	Cost of goods sold	Dr 2101		1 500	
	Inventories	Cr 3105			1 500
	(Sale at cost price)				
	Advertising expense	Dr 2301		950	
	GST clearing	Dr 4102		95	
	Bank	Cr 3103			1 045
	(Cash purchase services – CH44533)				
	Salaries and wages expense	Dr 2421		2 400	
	Bank	Cr 3103			2 400
	(Cash payment for wages – CH44534)				
17	Accounts payable – J Altona	Dr 4101.1		5 000	
	Bank	Cr 3103			5 000
	(Cash payment – CH44535)				
19	Sales returns	Dr 1101A		80	
	GST clearing	Dr 4102		8	
	Accounts receivable – Davo's of Dalby	Cr 3104.2			88
	(Credit sales returns – A025)				
	Inventories	Dr 3105		40	
	Cost of goods sold	Cr 2101			40
	(Sales returns at cost price)				
22	Accounts payable – Bedourie Suppliers	Dr 4101.2		5 005	
	Bank	Cr 3103			5 005
	(Cash payment – CH44536)				
	Accounts receivable – Gerard Industries	Dr 3104.5		1 100	
	Furniture	Cr 3201			1 000
	GST clearing	Cr 4102			100
	(Sold excess furniture – I9984)				
	Bank	Dr 3103		3 300	
	Accounts receivable – T & B Healy	Cr 3104.4			3 300
	(Cash received from debtor – R61)				
26	Bank	Dr 3103		440	
	Commission revenue	Cr 1103			400
	GST clearing	Cr 4102			40
	(Revenue received – R62)				
	Sales	Dr 1101		1 660	
	GST clearing	Dr 4102		166	
	Bank	Cr 3103			1 826
	(Correction – reversal 14/9/2009)				



Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
	Inventories	Dr 3105		830	
	Cost of goods sold	Cr 2101			830
	(Correction – reversal 14/9/2009)				
	Bank	Dr 3103		5 126	
	Sales	Cr 1101			4 660
	GST clearing	Cr 4102			466
	(Correction entry)				
	Cost of goods sold	Dr 2101		2 330	
	Inventories	Cr 3105			2 330
	(Correction entry)				
29	Drawings	Dr 5101A		4 000	
	Bank	Cr 3103			4 000
	(Owner withdrew cash – CH44537)				
	Drawings	Dr 5101A		220	
	Inventories	Cr 3105			200
	GST clearing	Cr 4102			20
	(Goods withdrawn by owner)				

Chart of accounts (extract) for Ballandean Computers

Revenue	Expenses	Assets	Liabilities	Owner's equity
1101	2101	3103	4101.1	5101
1101A	2301	3104.1	4101.2	5101A
1102	2413	3104.2	4101.3	
1103	2421	3104.3	4101.4	
		3104.4	4102	
		3104.5	4201	
		3105		
		3201		
		3204		

Ballandean Computers
General ledger (extract) – T-format

General ledger (continued) - Trial balance					
Dr					Cr
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
1101	Sales a/c				
Sep 26	Bank	1 660	Sep 2	Accounts receivable	
				– Davo's of Dalby	1 090
			14	Bank	1 660
			19	Accounts receivable	
				– T & B Healy	3 000
			26	Bank	4 660
1101A	Sales returns a/c				
Sep 19	Accounts receivable				
	– Davo's of Dalby	80			

Ballandean Computers
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
1101 Sales a/c				
Sep 2	Accounts receivable			
	– Davo's of Dalby		1 090	1 090 Cr
14	Bank		1 660	2 750 Cr
19	Accounts receivable – T & B Healy		3 000	5 750 Cr
26	Bank	1 660		4 090 Cr
	Bank		4 660	8 750 Cr
1101A Sales returns a/c				
Sep 19	Accounts receivable			
	– Davo's of Dalby	80		80 Dr



Ballandean Computers
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
1102	Service fees revenue a/c				
			Sep 5	Accounts receivable – F Roberts	310
1103	Commission revenue a/c				
			Sep 26	Bank	400
2101	Cost of goods sold a/c				
Sep 2	Inventories	545	Sep 19	Inventories	40
14	Inventories	830	26	Inventories	830
16	Inventories	1 500			
26	Inventories	2 330			
2301	Advertising expense a/c				
Sep 16	Bank	950			
2413	Office expenses a/c				
Sep 13	Accounts payable – Office Wonders	740			
2421	Salaries and wages a/c				
Sep 16	Bank	2 400			
3103	Bank a/c				
Sep 1	Balance b/d	34 500	Sep 11	Accounts payable – Metro Sales	6 600
4	Accounts receivable – I Isaacs	2 200	16	Advertising	950
14	Sales	1 660		GST clearing	95
	GST clearing	166		Salaries and wages	2 400
22	Accounts receivable – T & B Healy	3 300	17	Accounts payable – J Altona	5 000
26	Commission revenue	400	22	Accounts payable – Bedourie Suppliers	5 005
	GST clearing	40	26	Sales	1 660
	Sales	4 660		GST clearing	166
	GST clearing	466	29	Drawings	4 000

Ballandean Computers
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
1102 Service fees revenue a/c				
Sep 5	Accounts receivable – F Roberts		310	310 Cr
1103 Commission revenue a/c				
Sep 26	Bank		400	400 Cr
2101 Cost of goods sold a/c				
Sep 2	Inventories	545		545 Dr
14	Inventories	830		1 375 Dr
16	Inventories	1 500		2 875 Dr
19	Inventories		40	2 835 Dr
26	Inventories		830	2 005 Dr
	Inventories	2 330		4 335 Dr
2301 Advertising expense a/c				
Sep 16	Bank	950		950 Dr
2413 Office expenses a/c				
Sep 13	Accounts payable – Office Wonders	740		740 Dr
2421 Salaries and wages a/c				
Sep 16	Bank	2 400		2 400 Dr
3103 Bank a/c				
Sep 1	Balance			34 500 Dr
4	Accounts receivable – I Isaacs	2 200		36 700 Dr
11	Accounts payable – Metro Sales		6 600	30 100 Dr
14	Sales	1 660		31 760 Dr
	GST clearing	166		31 926 Dr
16	Advertising		950	30 976 Dr
	GST clearing		95	30 881 Dr
	Salaries and wages		2 400	28 481 Dr
17	Accounts payable – J Altona		5 000	23 481 Dr
22	Accounts receivable – T & B Healy	3 300		26 781 Dr
22	Accounts payable – Bedourie Suppliers		5 005	21 776 Dr
26	Commission revenue	400		22 176 Dr
	GST clearing	40		22 216 Dr
	Sales		1 660	20 556 Dr
	GST clearing		166	20 390 Dr
	Sales	4 660		25 050 Dr
	GST clearing	466		25 516 Dr
29	Drawings		4 000	21 516 Dr

Ballandean Computers General ledger (extract) – T-format						Ballandean Computers General ledger (extract) – columnar format				
Dr			Cr			Date	Particulars	Debit \$	Credit \$	Balance \$
Date	Particulars	Amount \$	Date	Particulars	Amount \$					
2009			2009			2009				
3104.1	Accounts receivable – I Isaacs					3104.1 Accounts receivable – I Isaacs				
Sep 1	Balance b/d	2 200	Sep 4	Bank	2 200	Sep 1	Balance			2 200 Dr
						4	Bank		2 200	0
3104.2	Accounts receivable – Davo's of Dalby					3104.2 Accounts receivable – Davo's of Dalby				
Sep 2	Sales	1 090	Sep 19	Sales returns	80	Sep 2	Sales	1 090		1 090 Dr
	GST clearing	109		GST clearing	8		GST clearing	109		1 199 Dr
						19	Sales returns		80	1 119 Dr
							GST clearing		8	1 111 Dr
3104.3	Accounts receivable – F Roberts					3104.3 Accounts receivable – F Roberts				
Sep 5	Service fees revenue	310				Sep 5	Service fees revenue	310		310 Dr
	GST clearing	31					GST clearing	31		341 Dr
3104.4	Accounts receivable – T & B Healy					3104.4 Accounts receivable – T & B Healy				
Sep 16	Sales	3 000	Sep 22	Bank	3 300	Sep 16	Sales	3 000		3 000 Dr
	GST clearing	300					GST clearing	300		3 300 Dr
						22	Bank		3 300	0
3104.5	Accounts receivable – Gerard Industries					3104.5 Accounts receivable – Gerard Industries				
Sep 22	Furniture	1 000				Sep 22	Furniture	1 000		1 000 Dr
	GST clearing	100					GST clearing	100		1 100 Dr
3105	Inventories a/c					3105 Inventories a/c				
Sep 1	Balance b/d	14 000	Sep 2	Cost of goods sold	545	Sep 1	Balance			14 000 Dr
	Accounts payable – Bedourie Suppliers	4 960	9	Accounts payable – Bedourie Suppliers	410		Accounts payable – Bedourie Suppliers	4 960		18 960 Dr
19	Cost of goods sold	40	14	Cost of goods sold	830	2	Cost of goods sold		545	18 415 Dr
26	Cost of goods sold	830	16	Cost of goods sold	1 500	9	Accounts payable – Bedourie Suppliers		410	18 005 Dr
			26	Cost of goods sold	2 330	14	Cost of goods sold		830	17 175 Dr
			29	Drawings	200	16	Cost of goods sold		1 500	15 675 Dr
						19	Cost of goods sold	40		15 715 Dr
						26	Cost of goods sold	830		16 545 Dr
							Cost of goods sold		2 330	14 215 Dr
						29	Drawings		200	14 035 Dr
3201	Furniture a/c					3201 Furniture a/c				
Sep 1	Balance	23 000	Sep 22	Accounts receivable – Gerard Industries	1 000	Sep 1	Balance			23 000 Dr
						22	Accounts receivable – Gerard Industries		1 000	22 000 Dr
3204	Motor vehicle a/c					3204 Motor vehicle a/c				
Sep 11	Accounts payable – Metro Sales	30 000				Sep 11	Accounts payable – Metro sales	30 000		30 000 Dr
4101.1	Accounts payable – J Altona					4101.1 Accounts payable – J Altona				
Sep 17	Bank	5 000	Sep 1	Balance	13 200	Sep 1	Balance			13 200 Cr
						17	Bank	5 000		8 200 Cr

Ballandean Computers
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
4101.2	Accounts payable – Bedourie Suppliers				
Sep 9	Inventories	410	Sep 1	Inventories	4 960
	GST clearing	41		GST clearing	496
22	Bank	5 005			
4101.3	Accounts payable – Metro Sales				
Sep 11	Bank	6 600	Sep 11	Motor vehicle	30 000
				GST clearing	3 000
4101.4	Accounts payable – Office Wonders				
			Sep 13	Office expenses	740
				GST clearing	74
4102	GST clearing a/c				
Sep 1	Accounts payable		Sep 1	Balance b/d	1 000
	– Bedourie Suppliers	496	2	Accounts receivable	
11	Accounts payable			– Davo's of Dalby	109
	– Metro Sales	3 000	5	Accounts receivable	
13	Accounts payable			– F Roberts	31
	– Office Wonders	74	9	Accounts payable	
16	Bank	95		– Bedourie Suppliers	41
19	Accounts receivable		14	Bank	166
	– Davo's of Dalby	8	16	Accounts receivable	
26	Bank	166		– T & B Healy	300
			22	Accounts receivable	
				– Gerard Industries	100
			26	Bank	40
				Bank	466
			29	Drawings	20
4201	Loan from Bank of Queensland				
			Sep 1	Balance	30 000
5101	Capital – Margie Reed				
			Sep 1	Balance	29 500

Ballandean Computers
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
4101.2	Accounts payable – Bedourie Suppliers			
Sep 1	Inventories		4 960	4 960 Cr
	GST clearing		496	5 456 Cr
9	Inventories	410		5 046 Cr
	GST clearing	41		5 005 Cr
22	Bank	5 005		0
4101.3	Accounts payable – Metro Sales			
Sep 11	Motor vehicle		30 000	30 000 Cr
	GST clearing		3 000	33 000 Cr
	Bank	6 600		26 400 Cr
4101.4	Accounts payable – Office Wonders			
Sep 13	Office expenses		740	740 Cr
	GST clearing		74	814 Cr
4102	GST clearing a/c			
Sep 1	Balance			1 000 Cr
	Accounts payable			
	– Bedourie Suppliers	496		504 Cr
2	Accounts receivable			
	– Davo's of Dalby		109	613 Cr
5	Accounts receivable			
	– F Roberts		31	644 Cr
9	Accounts payable			
	– Bedourie Suppliers		41	685 Cr
11	Accounts payable			
	– Metro Sales	3 000		2 315 Dr
13	Accounts payable			
	– Office Wonders	74		2 389 Dr
14	Bank		166	2 223 Dr
16	Accounts receivable			
	– T & B Healy		300	1 923 Dr
16	Bank	95		2 018 Dr
19	Accounts receivable			
	– Davo's of Dalby	8		2 026 Dr
22	Accounts receivable			
	– Gerard Industries		100	1 926 Dr
26	Bank		40	1 886 Dr
	Bank	166		2 052 Dr
	Bank		466	1 586 Dr
29	Drawings		20	1 566 Dr
4201	Loan from Bank of Queensland			
Sep 1	Balance			30 000 Cr
5101	Capital – Margie Reed			
Sep 1	Balance			29 500 Cr

Ballandean Computers General ledger (extract) – T-format						Ballandean Computers General ledger (extract) – columnar format				
Dr					Cr					
Date	Particulars	Amount	Date	Particulars	Amount	Date	Particulars	Debit	Credit	Balance
		\$			\$			\$	\$	\$
2009			2009			2009				
5101A	Drawings					5101A Drawings				
Sep 29	Bank	4 000				Sep 29 Bank		4 000		4 000 Dr
	Inventories	200					Inventories	200		4 200 Dr
	GST clearing	20					GST clearing	20		4 220 Dr

Ballandean Computers Trial balance as at 30 September 2009			
Account no.	Account	Debit \$	Credit \$
1101	Sales		8 750
1101A	Sales returns	80	
1102	Service revenue		310
1103	Commission revenue		400
2101	Cost of goods sold	4 335	
2301	Advertising expense	950	
2413	Office expense	740	
2421	Salaries and wages	2 400	
3103	Bank	21 516	
3104.2	Accounts receivable – Davo's of Dalby	1 111	
3104.3	Accounts receivable – F Roberts	341	
3104.5	Accounts receivable – Gerard Industries	1 100	
3105	Inventories	14 035	
3201	Furniture	22 000	
3204	Motor vehicle	30 000	
4101.1	Accounts payable – J Altona		8 200
4101.3	Accounts payable – Metro Sales		26 400
4101.4	Accounts payable – Office Wonders		814
4102	GST clearing	1 566	
4201	Loan from Bank of Queensland		30 000
5101	Capital – M Reed		29 500
5101A	Drawings	4 220	
		<u>\$104 374</u>	<u>\$104 374</u>

Understandings

- Accounting plays a vital role in the business world. It is a discipline that measures, reports and interprets financial and other information about an organisation to interested parties. Decisions will subsequently be made on the basis of this information.
- Accounting standards, which are the basic rules and practices that accountants follow, are developed by the Australian Accounting Standards Board (AASB).
- The accounting profession is organised into major accounting bodies, namely CPA Australia and the Institute of Chartered Accountants in Australia.
- Members of these bodies are bound to uphold the ethics and standards as set down in the various regulations.
- Members of these bodies can work as public accountants, or be employed in private business or government.
- The accounting profession can encompass various fields of accounting, including auditing, company accounting, taxation, finance, cost accounting, budgeting, management advisory services, accounting information systems and government accounting, insolvency, e-business, financial planning and international accounting.
- Accounting practices are influenced by legal and technological change and changing social expectations related to business conduct.
- Inadequate accounting records cause the failure of many small businesses.
- Accounting records represent valuable information.
- The accounting entity convention separates the owner from the business for accounting purposes.
- Accounting records are grouped into five main categories:
 - assets
 - liabilities
 - owner's equity
 - revenue
 - expenses.
- It is a basic assumption that asset accounts have a debit nature.
- Double entry means that for every transaction recorded in the accounts, total debits must equal total credits.
- A transaction is a financial event that affects the elements of the accounting equation.
- Accounting records are based on the accounting equation:
Assets equals liabilities plus owner's equity:

$$A = L + OE$$
- The rules for debit and credit are derived from the accounting equation.
- Every time a transaction occurs, some record must be made of the transaction. The record is called a source document.
- Source documents vary in appearance and in the way documents are generated and transmitted – manually generated or computer-generated.
- A source document must collect essential data for entry into the accounting system. It provides evidence as to the validity of transactions. Typical documents used include receipts, cheques, tax invoices and adjustment notes.
- The general journal approach focuses on the analysis of transactions to determine the double-entry effect.

Exercises

★ 1.1 Objectives of accounting



Summarise the objectives of accounting under three headings.

★ 1.2 The accounting profession in Australia – stimulus material



Read the article below and answer the following questions.

- a** Answer these questions either by discussion or in well-structured sentences.
- Who can consider themselves 'accountants'?
 - What is it that CPA Australia Ltd does to ensure that its members offer the best and latest advice?
 - When would an individual or a business consult an accountant?
 - Where do CPAs work?
 - How can the public ensure that they are using the services of a qualified accountant?
 - Research the two other accounting bodies by visiting their websites at <www.icaa.org.au> and <www.nia.com.au>. What other 'designations' can the public look for in order to be assured of professional standards and knowledge?
- b** The following words have been italicised in the article. Explain their meaning in the context given in the article.

Mandatory
Profitability
Stock
Compliance

Auditing
Stability
Cash flow
Corporations law

Business plan
Equity funds
Regimes
Designation

See also chapter 9,
R&P1 on page 465
and R&P4 on page
468.

There's more to your accountant than meets the eye

CPA Australia has strict requirements to ensure its members can offer the best and latest advice. The organisation admits graduates from recognised university courses as Associates who then go on to gain their professional qualification.

This is achieved after a period of satisfactory, monitored workplace experience, along with successful completion of the postgraduate CPA Program, which usually takes three years.

Once admitted as a CPA, an accountant must continue with the organisation's structured professional development program. This continuing professional development is *mandatory* and is designed to keep members at the forefront of their chosen segments in the accounting profession.

Almost three-quarters of CPA Australia's 92 000 members are employed in commerce, industry, or the public sector, usually in senior management positions. Many CPAs are in practice as public accountants providing advice to businesses and individuals.

Typical services provided by CPAs include:

- *Auditing* business procedures to measure real costs and identifying where improvements can be made.
- Preparing and monitoring a *business plan* which sets goals and has checkpoints for *profitability*, *stability* and expansion.

- Preparing and negotiating applications for loan funds, government assistance or the raising of *equity funds*.
- Advising how the ownership of a business should be structured in order to maximise returns while protecting the interests of various parties.
- Establishing *stock* and *cash flow* management systems.
- Advising on business information technology.
- Managing the various tax *regimes* including income tax, GST, capital gains tax, fringe benefits tax, PAYG and others so that no more tax is paid than is necessary.
- Advising on *compliance* procedures dealing with business regulations, workers compensation, *corporations law* and other matters.
- Researching the value of a business being considered for purchase or for sale.

But be warned: the term 'accountant' is not protected in any way and anyone can call themselves an accountant. That is why the CPA *designation* is so important. It is a guarantee of professional standards and knowledge.

Source: CPA Australia Ltd 2001, media release, 31 May, <www.cpaaustralia.com.au>.

See exercises
A1.1 and
A1.2.

★ 1.3 The accounting profession in Australia



Write a paragraph or two that could be used as a media release on the topic: 'Warning: is your accountant really an accountant?'

★ 1.4 The accounting profession in Australia – web search of professional bodies

Conduct some research using the web addresses of the three professional bodies given on page 7. What resources are offered for students? Are there any that you could take advantage of during your course of study in Years 11 and 12? Bookmark these sites.

★ 1.5 The accounting profession in Australia – survey

Using the employment section of a weekend newspaper, conduct a survey of the number and type of jobs available for accountants. Arrange your collected data under the following headings:

Job description	Salary	Years of experience required	Level of education required	Membership of professional association required
-----------------	--------	------------------------------	-----------------------------	---

★ 1.6 The accounting profession in Australia – explaining the differences



Write a short paragraph that shows your understanding of the differences between working in private, public and government sectors as an accountant. Use the following structure:

- Write an introductory sentence which states that, although accountants do similar work, they can work in very different roles.
- Your next sentence could indicate the sectors in which accountants can work.
- In your next three sentences, explain what an accountant would do while working in each of these areas.
- Your concluding sentence might indicate employment options for accountants.

★ 1.7 Forensic accounting



Read the article below and answer the following questions.

- Who can be a forensic accountant?
- When are forensic accountants required?
- Where does the word 'forensic' come from?
- Why would forensic accountants be involved in family law matters such as divorce?
- How does technology assist the work of the forensic accountant?

Forensic accounting — people in trenchcoats with green pens?

Andrew Ross, FCA

Partner – Ferrier Hodgson Forensics

National Chair – Forensic Accounting Special Interest Group

What do you imagine when you hear the term 'Forensic Accounting'? Common responses include:

- 'What's that?'
- 'Is that something to do with counting bodies?'
- 'Do you have to hide in dark alleyways waiting to audit someone?'
- 'Is that a bit like CSI for accountants?'

While the literal meaning is somewhat less glamorous than these responses suggest ('forensic'

means 'in or of the court', so a 'forensic accountant, literally, is an accountant who practices his or her profession in the context of court proceedings), the practice of forensic accounting is both varied and interesting.

The practice of forensic accounting first became recognised as a separate discipline in Australia in the 1980s. Back then, forensic accountants spent most of their time valuing businesses in the context of family law disputes and calculating losses suffered by people who had had motor vehicle accidents.

Forensic accounting in the 21st century is a very much more varied profession. Besides helping in family law and personal injury disputes, forensic accountants are engaged in a range of tasks including:

- calculating the losses suffered by a company when

a supplier or customer breaches an agreement with the company

- advising entities on how they can change their systems and controls to reduce the risk that they may suffer a fraud
- investigating frauds that have happened and following money trails to recover the proceeds of crime
- extracting and analysing hidden or deleted information from lap-tops, PCs, servers, PDAs and other electronic communication devices
- acting as a mediator, arbitrator or expert determinator to resolve commercial disputes
- appearing in Courts and other tribunals to give expert evidence on the things they have investigated.

A career in forensic accounting involves constant variety and frequent challenges. No two forensic accounting client engagements are the same. Every day

on the job involves searching for, uncovering, analysing, summarising and presenting facts and opinions. Whether you are a graduate or a partner, as a forensic accountant you will face the mental test of uncovering the hidden and understanding the complex, often under the time pressure of a looming court deadline or the risk that the money you're tracing will disappear forever.

As a graduate accountant, you can expect to spend a lot of your time analysing and making sense of the information related to each engagement. Some of this will be paper-based. Some will be electronic. You will need an inquiring mind, and ability to spot the connections between discrete pieces of information and excellent written and oral communication skills. One thing you can be sure of – you'll never be bored as a forensic accountant!

Source: Extract from Institute of Chartered Accountants in Australia, <www.charteredaccountants.com.au>

★ 1.8 Ethics



NIA's code of professional conduct says that 'integrity' and 'objectivity' are fundamental principles of the code of behaviour for national accountants. Explain what is meant by these two terms.

★ 1.9 Factors impacting on accounting – what are they?



Research the current developments in XBRL at <www.xbrl.org> and list some interesting facts about this technology.

★ 1.10 Factors impacting on accounting

Check the media releases of each of the professional bodies mentioned on page 7 and note some points of interest that are current factors impacting on accounting.

★★ 1.11 Accounting entity assumption



Explain in a well-structured paragraph what is meant by the accounting entity assumption. Use the following guide:

- Topic sentence – what is the accounting entity assumption?
- Evidence – what does this mean in practice for a business owner's accounting records?
- Formed opinion – how is the accounting view of a business different from the legal view?

★★ 1.12 Accounting entity assumption – make a decision and explain



Examine the following scenarios. Make a decision about whether or not the accounting entity assumption has been followed. Write a sentence or two to explain the decision you make.

- Jane Farrow is a lawyer. Her practice has been very successful and, consequently, she has been able to purchase an investment portfolio of shares with some of the earnings from the practice. The accounting records for Jane's law practice do not include this investment portfolio.
- William Cheng owns a private residential house valued at \$400 000 and has invested \$100 000 cash in a new business. William has listed his investment in the business as \$500 000.
- Liam Rapson begins a small business as a mechanic. He drives his own private vehicle to his rented workshop each day but does not use it for business purposes. The car is valued at \$21 500. Liam had listed his vehicle as part of his investment in the business.
- Daniel Mole begins a small business as a mechanic. He drives his vehicle (valued at \$21 500) to his rented workshop each day and has had his business logo painted on the sides of the car. He uses the vehicle for work purposes during the day to collect spare parts from wreckers and wholesale suppliers, to purchase lunch, and to drive to the post office to clear the business's post box. Daniel has listed the vehicle as part of his investment in the business.

See also chapter 9, R&P3 on page 467.

★★ 1.13 Accounting entity versus legal entity – explaining in an email

See exercises
A1.3 and
A1.4.



A student in your class has been absent for the discussion about the difference between an accounting entity and a legal entity. Compose an email to this student that clearly distinguishes between the concepts. Use examples to make your explanation as clear as possible.

★★ 1.14 Sole trader – advantages and disadvantages



Write a paragraph about the advantages and disadvantages of operating a sole trader business. Use the following checklist to ensure that you have answered the question comprehensively.

- Definition of sole trader
- Set-up costs
- Process for establishment
- Decision-making
- Entitlement to profits
- Consequence of losses
- Legal entity status
- Unlimited liability

★ 1.15 Trading business – listing items of goods/products sold

See exercise A1.5.

What type of items would constitute trading goods for the following businesses?

- | | |
|-------------------------------------|----------------------------|
| a Sports shop | h Music store |
| b Bathroom renovation centre | i Electrical store |
| c Pet shop | j Hairdresser |
| d Gardening centre | k Sewing specialist |
| e Hardware store | l Surf shop |
| f Stationery shop | m Fashion store |
| g Motor vehicle dealer | |

★ 1.16 Service and trading businesses – listing services

See exercises
A1.6 and A1.7.

Consider each type of business listed in exercise 1.15. List a service each could offer in addition to its trading activities.

★ 1.17 Classification of A, L, Oe accounts

Draw up three columns. Categorise the accounts below under one of the following headings: (1) Owned by the business; (2) Owed by the business; and (3) Owner's investment (contribution) in the business.

- | | |
|--|--|
| • Amounts owing to other businesses | • Patent for new design of a light fitting |
| • The business's bank account | • Cash in a petty cash tin |
| • Office equipment | • Holden ute (registration no. AAB – 998) |
| • Office building | • Debentures in ZZZ Co. |
| • Vacant block purchased for new store development | • Loan due to be repaid next year |
| • Loan from finance company | • Amounts owing to the business |
| • Computerised security system | • Equipment |
| • Copyright of a musical score | • Computer equipment |
| • Cash in hand held by business | • Newspaper masthead |
| • Owner's cash contribution | • Float of cash held in a cash register |

★★ 1.18 The accounting equation – state and explain

See exercises
A1.8 and
A1.10.



a State the accounting equation in the form that best illustrates the accounting entity assumption.

b Explain the relationship between the elements of the accounting equation.

★★ 1.19 The accounting equation – explain



Write a sentence that illustrates what is meant by the equation $A = L + Oe$.

★★ 1.20 Accounting assumptions and concepts – explanatory paragraphs



A fellow accounting student has been struck down with a mystery virus over the past week and is concerned about missed work. Email this friend explaining the concepts covered in this section to this point. Your email should cover types of accounts and the accounting equation.

★ **1.21 Effects of transactions on the accounting equation – A, L, Oe**

Determine the missing figure in each case.

	Assets	=	Liabilities	+	Owner's equity
a	\$8 000	=	\$6 000	+	?
b	\$50 000	=	?	+	\$50 000
c	\$780 000	=	\$80 000	+	?
d	?	=	\$150 000	+	\$500 000
e	\$456 900	=	\$0	+	?
f	\$100 000	=	?	+	\$57 000
g	?	=	\$78 000	+	\$178 000
h	\$87 000	=	\$70 800	+	?
i	?	=	\$50 000	+	\$85 500
j	\$755 000	=	?	+	\$155 000
k	\$78 800	=	\$55 100	+	?
l	\$728 600	=	?	+	\$275 500

★ **1.22 Effects of transactions on the accounting equation – A, L, Oe**

- a** Petra Clarke contributes a vehicle worth \$26 000, inventories worth \$12 000 and cash of \$20 000 to begin her business.
- b** Daniel West has borrowed \$50 000 cash from the bank. He has then purchased a vehicle for \$23 000 and furniture for the business valued at \$27 000. He made an original contribution of cash \$10 000 and equipment worth \$21 000.
- c** Howard Johnston says he has \$300 000 in assets in his business, but he has also declared that he has borrowings of \$350 000. Could this be accurate? Why/why not?

★ **1.23 Transaction analysis – A, L, Oe**

Determine whether the following accounts are increasing or decreasing due to the transaction that has occurred and determine whether to debit or credit the particular account.

Transaction	Accounts involved	Inc. or Dec.	Dr or Cr
a J Wong begins business by depositing \$20 000 cash into a bank account for the business	Bank Capital, J Wong		
b Bought furniture and fittings for the business on credit from Fitters Fit Ltd for \$12 000	Furniture and fittings Accounts payable (Fitters Fit Ltd)		
c Paid cash for office equipment \$4 900	Bank Office equipment		
d Borrowed cash from ANX Banking Corp. \$40 000	Bank ANX Banking Corp.		
e Purchased a vehicle for the business valued at \$39 900 and paid by cheque (cash)	Vehicle Bank		
f Bought land valued at \$190 000. Organised a mortgage for this purchase from ANX Banking Corp.	Land Mortgage		
g J Wong contributed another \$40 000 to the business	Bank Capital, J Wong		

★ **1.24 Double entry – A, L, Oe**

Consider each line independently and suggest the transaction that has resulted in each double entry.

Debit entry		Credit entry	
a	Bank 20 000	Capital 20 000	
b	Bank 82 000	Loan from bank 82 000	
c	Accounts payable 25 000	Bank 25 000	
d	Furniture 10 000	Bank 10 000	
e	Equipment 35 000	Accounts payable 20 000	
		Bank 15 000	
f	Accounts receivable 12 000	Furniture 12 000	
g	Land 90 000	Bank 90 000	
h	Shares 50 000	Bank 50 000	
i	Cash management fund 30 000	Bank 30 000	
j	Furniture 30 000	Capital 130 000	
	Accounts receivable 10 000		
	Equipment 50 000		
	Motor vehicle 40 000		

★ 1.25 Transaction analysis table – A, L, Oe

See exercises
A1.11–A1.19.

Jean Phillips is a seamstress. Complete a transaction analysis table for her business, Jean's Bridal Boutique.

Mar	4	Jean deposited \$150 000 cash into a bank account to begin business
	11	Paid cash for sewing equipment \$15 000
	12	Borrowed 100% of the value of premises worth \$200 000 from NA Bank
	16	Finalised contract for premises; signed a cheque for \$200 000
	19	Purchased motor vehicle on credit from Mooloolaba Motors \$45 000
	27	Paid North Coast Fitters \$10 000 for display fittings and fixtures
	30	Withdrew \$200 from the bank to use as the business cash 'float'. Record as cash on hand
	31	Invested cash of \$10 000 into debentures in Holey Kow Company

★★ 1.26 Transaction analysis table – A, L, Oe

Complete a transaction analysis table for each of the following transactions.

- a** Thurston Howell begins his corporate video business by depositing \$33 000 cash into a bank account in the name of the business.
- b** Borrowed \$130 000 from Good Lending Bank Ltd.
- c** Bought freehold premises for \$100 000. Paid by cheque.
- d** Bought video equipment for \$12 000 on credit from Aussie Technical Pty Ltd.
- e** Bought furniture from Mackay Furniture on credit for \$10 000.
- f** Thurston contributed another \$5 000 cash and a vehicle worth \$15 000 to the business.
- g** Purchased computer equipment for \$8 000 cash.

★ 1.27 Transaction analysis table – A, L, Oe

Complete a transaction analysis table for E Duncan's business.

Retain your answer
for use in exercise
1.40.

2009		
Feb	2	E Duncan purchased an existing business that listed the following assets and liabilities: accounts receivable – T Chapman \$20 000, accounts payable – Y Salton \$35 000, premises \$180 000, mortgage on premises \$64 000, equipment \$5 000 and furniture \$12 000
	4	Borrowed cash of \$120 000 from the National Bank
	11	Paid \$45 000 for a new motor vehicle for the business
	18	Purchased (on credit from J Hogan) equipment for the business valued at \$22 000
	27	E Duncan purchased a domestic property from AAA Realty for \$250 000 and borrowed the funds from the National Bank. The property is not for business use

★ 1.28 **Transaction analysis table – A, L, Oe**

Complete a transaction analysis table for Gerard O'Dempsey's business:

Retain your answer
for use in exercises
1.41 and 1.47.

2009

- | | | |
|-----|----|---|
| May | 4 | Contributed the following assets to begin business: motor vehicle \$24 900 and \$40 000 cash |
| | 5 | Purchased another motor vehicle on credit from Great Deals Pty Ltd for \$25 000 and paid a deposit of \$5 500 |
| | 9 | Borrowed \$150 000 cash from S Puri |
| | 14 | Bought equipment on credit from AWA Markets Pty Ltd \$11 000 |
| | 23 | Paid Great Deals Pty Ltd the remainder of the amount owing to them |

★★ 1.29 **Transaction analysis table – A, L, Oe**

Complete a transaction analysis table for Ebony Berrell for transactions in the month of March.

Retain your answer
for use in exercises
1.42 and 1.48.

2009

- | | | |
|-----|----|--|
| Mar | 2 | Ebony purchased an existing business that listed the following assets and liabilities: accounts receivable – M Smeltzer \$200 000, accounts payable – A Petoulis \$350 000, land and buildings \$560 000, mortgage on land and buildings \$460 000, furniture and fittings \$350 000 and equipment \$312 000 |
| | 4 | Borrowed cash of \$1 000 000 from Good Onya Finance Co. |
| | 18 | Purchased new furniture for the business on credit from J Malone, \$125 000 |
| | 20 | Purchased a new motor vehicle for the business valued at \$58 000 from Ciaran's Car Sales. Paid a deposit of \$10 000 with the remainder to be paid at the end of next month |
| | 27 | Signed a contract with AAA Realty for a residential property for \$250 000 intended for domestic, not business, use. The mortgage for the property is to be held by AXB Bank Co. |
| | 31 | E Berrell received an inheritance of \$500 000, half in cash and half in property. She decided to invest the property and half the cash into the business |

★ 1.30 **Classification of accounts – R, E, A, L, Oe**

The business of K Treeby provides management services to elite sportspeople. Classify the following items as revenue, expenses, assets, liabilities or owner's equity for the business.

See also chapter 9,
R&P2 on page 466.

- | | |
|-------------------------------------|--|
| a Bank loan | h Wages of personal assistant |
| b Computer | i A Williams (K Treeby is owed an amount for services rendered) |
| c Cash in hand | j Postage |
| d Motor vehicle | k Consultancy fees charged by K Treeby |
| e Motor vehicle registration | l Drawings of cash by the owner, K Treeby |
| f Rent of premises | |
| g Bank overdraft | |

★ 1.31 **Account rules – R, E, A, L, Oe**

State whether the accounts should increase or decrease in value because of the following transactions

- | | |
|--|---|
| a Bank (debit); fees revenue (credit) | e P Pope (debit); furniture (credit) |
| b Rent revenue (credit); bank (debit) | f Bank (debit); bank loan (credit) |
| c C Rollings (debit); sales (credit) | g Drawings (debit); bank (credit) |
| d Supplies expense (debit); Big Top Stationery (credit) | h Wages (debit); bank (credit) |

★★ 1.32 **Accounts – explain differences**

Explain the essential difference between the following accounts.

- | | |
|---|---------------------------------|
| a accounts receivable and accounts payable | d bank loan and interest |
| b capital and bank | e sales and fees revenue |
| c motor vehicle and motor vehicle expenses | |

★★ 1.33 **Revenue and expense accounts for service versus trading businesses**

Consider the following businesses. Determine the name of the account each business would use to record its main source of revenue and possible expense accounts that might be needed by the business.

- | | |
|--|---|
| a Balanced Educational Toys Company | h Ooloomooloo Veterinary Practice |
| b Mowers R Us | i Madeleine's Medical Supplies |
| c Lynch Crane Hire Service | j Goode-O Car Sales |
| d Southside Beauty | k Johnston and Johnston Employment Consultancy |
| e K P Meaney – Accountant | l Woodora Horse Stud Farm |
| f S Sylvania and Associates Lawyers | |
| g Toowong Orthodontic Practice | |

★ **1.34 Accounting concepts – explanatory paragraphs**



L Duffield, the owner of Duffield Cleaning Services, is under the misconception that double entry means information is entered twice. As the accountant for L Duffield, write a paragraph explaining that this understanding of double entry is incorrect. Ensure the paragraph clearly explains the correct meaning of the term 'double entry'. Use the following guide:

- First sentence: State clearly that the understanding of the term is incorrect.
- Second sentence: State the correct understanding of the term.
- Third sentence: Give an example.
- Fourth sentence: State what the misconception has been based on (such as two entries).
- Fifth sentence: State what the term actually relates to – a fundamental accounting concept such as the accounting equation.
- Final sentences: Explain how the concept of double entry is derived from this equation and how it affects transactions that must always keep the equation in balance.

★ **1.35 Double entry – R, E, A, L, Oe**

State whether the following would result in a debit or credit entry in the ledger:

- | | |
|---|---|
| a An asset account increases in value | e An asset account decreases in value |
| b A liability account increases in value | f A liability account decreases in value |
| c An owner's equity account decreases in value | g An expense account increases in value |
| d A revenue account increases in value | h An owner's equity account increases in value |

★ **1.36 Explanatory paragraphs – letter explaining R, E, A, L, Oe and the accounting equation**



Compose a letter in response to the following question.

Extract from a letter sent to you by Scott Patterson, a friend, of 235 Cambridge Parade, Manly 4179:

I understand assets, liabilities and the owner's investment all relate together and that we can express this as the accounting equation, but what are revenues and expenses and how do they impact on the accounting equation?

★★ 1.37 Transaction analysis table – R, E, A, L, Oe

Retain your answer
for use in exercises
1.43 and 1.49.

R Penhurst is a hairdresser. Analyse the following transactions for this business, Short Back and Sides Hairdressing.

2009

- | | | |
|-----|----|---|
| Feb | 1 | Purchased hairdressing supplies for \$779 cash |
| | 5 | Paid salon assistant wages of \$355 |
| | 6 | Cash sale of services \$600 |
| | 7 | Owner withdrew \$100 for own use |
| | 9 | Paid rent of salon premises \$900 |
| | 10 | Purchased supplies on credit from GH Supplies Ltd for \$338 |
| | 22 | Paid Optus for telephone \$154 |
| | 24 | Cash sales of services \$550 |
| | 27 | Performed services for a large wedding party and received \$300 |
| | 28 | Cash sale of services \$877 |

★★ 1.38 Transaction analysis table – R, E, A, L, Oe

Retain your answer
for use in exercises
1.44 and 1.50.

Complete a transaction analysis table for R Bowman's business, Ritzy Résumés, for the month of May.

2009

- | | | |
|-----|---|--|
| May | 1 | Received an inheritance of \$40 000 from a relative, K Packer, and invested all of this cash into the business. |
| | 2 | Purchased computer equipment on credit from K Cooke for \$6 200 |
| | 3 | Invoiced St Aloysius School in Longreach for \$500 for an in-service session conducted in the school |
| | 4 | Bought furniture for the business for \$14 000 cash
Purchased more equipment on credit from R Lauren for \$21 000 and paid a deposit of \$1 000 |
| | 5 | Received \$1 500 cash from clients for a workshop on writing résumés |
| | 6 | Paid \$380 for stationery supplies for the business |

★ 1.39 Journalising transactions

Using the following transaction analysis table for M Ong, prepare the general journal entries.

Date	Transaction	Accounts involved	Account type	Nature of the account	Inc. or Dec.	Same or opposite to nature	Debit \$	Credit \$
2009								
Aug 1	Contributed the following assets to begin business: cash \$5 000, equipment \$10 000 and motor vehicle \$22 500 (R001)	Bank Equipment Motor vehicle Capital	Asset Asset Asset Owner's equity	Debit Debit Debit Credit	Inc. Inc. Inc. Inc.	Same Same Same Same	5 000 10 000 22 500	37 500
Aug 2	Paid \$1 000 cash for advertising expense (CH001)	Bank Advertising	Asset Expense	Debit Debit	Dec. Inc.	Opp. Same	1 000	1 000
Aug 3	Purchased more equipment on credit from Hot Shot Suppliers for \$21 500 and paid a deposit of \$1 500 (ref # 999, CH002)	Equipment Accounts payable – Hot Shot Suppliers Bank	Asset Liability Asset	Debit Credit Debit	Inc. Inc. Dec.	Same Same Opp.	21 500	20 000 1 500
Aug 5	Received \$670 cash for commissions (R002)	Bank Commission revenue	Asset Revenue	Debit Credit	Inc. Inc.	Same Same	670	670
Aug 8	Borrowed \$50 000 cash from ANZ Bank (R003)	Bank Loan from ANZ Bank	Asset Liability	Debit Credit	Inc. Inc.	Same Same	50 000	50 000
Aug 15	Bought furniture for the business for \$125 cash (CH003)	Furniture Bank	Asset Asset	Debit Debit	Inc. Dec.	Same Opp.	125	125
Aug 20	Paid cash for the following expenses: telephone \$230 (CH004) electricity \$300 (CH005) rates \$500 (CH006)	Bank Telephone expense Electricity expense Rates expense	Asset Expense Expense Expense	Debit Debit Debit Debit	Dec. Inc. Inc. Inc.	Opp. Same Same Same	230 300 500	1 030
24	Paid Hot Shot Suppliers the amount owing to them (CH007)	Bank Accounts payable — Hot Shot Suppliers	Asset Liability	Debit Credit	Dec. Dec.	Opp. Opp.	20 000	20 000

★ 1.40 Journalising transactions

See exercises
A1.20–A1.26.

Using the transaction analysis table prepared for E Duncan's business in exercise 1.27 on page 114, prepare the general journal entries. Number all source documents and references beginning at 001.

★ 1.41 Journalising transactions

Retain your answer
for use in exercise
1.47.

Using the transaction analysis table prepared for Gerard O'Dempsey's business in exercise 1.28 on page 115, prepare the general journal entries. Number all source documents and references beginning at 001.

★ 1.42 Journalising transactions

Retain your answer
for use in exercise
1.48.

Using the transaction analysis table prepared for Ebony Berrell's business in exercise 1.29 on page 115, prepare the general journal entries. Number all source documents and references beginning at 001.

★ 1.43 Journalising transactions

Retain your answer
for use in exercise
1.49.

Using the transaction analysis table prepared for R Penhurst's business, Short Back and Sides Hairdressing, in exercise 1.37 on page 117, prepare the general journal entries. Number all source documents and references beginning at 001.

★ 1.44 Journalising transactions

Retain your answer
for use in exercise
1.50.

Using the transaction analysis table prepared for R Bowman's business, Ritzy Résumés, in exercise 1.38 on page 117, prepare the general journal entries. Number all source documents and references beginning at 001.

★★★ 1.45 Analyse and interpret a general journal

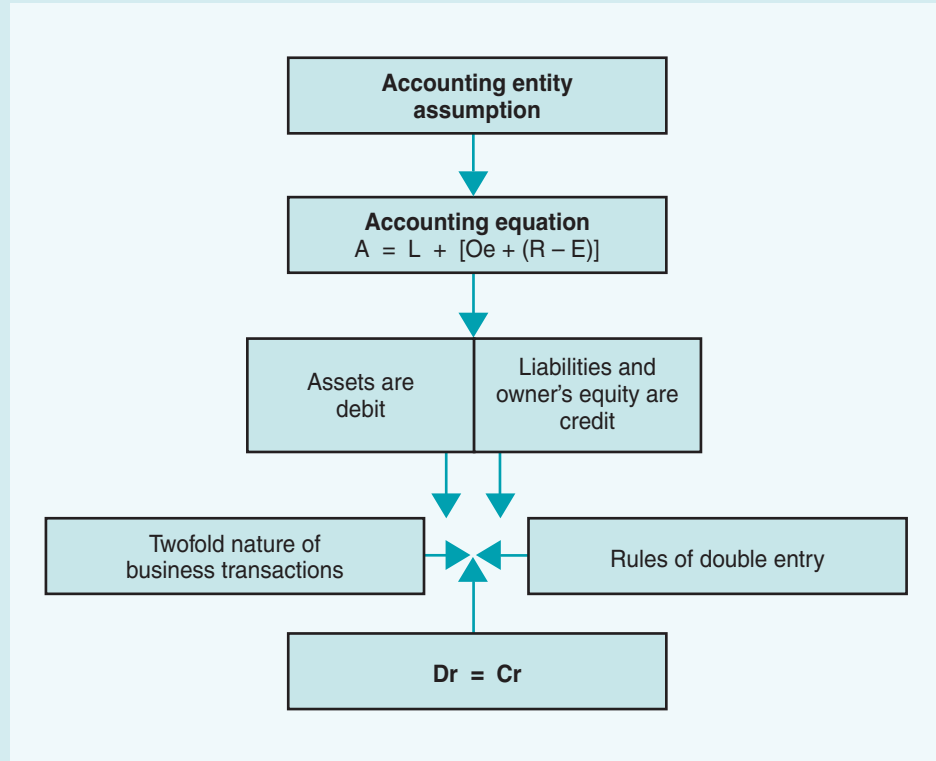
Analyse and interpret the general journal prepared for Campbell Editorial Services to determine the transactions that have occurred:

General journal					
Date 2009	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jul 1	Bank Capital, R Campbell (Owner contributes cash R001)	3103 5101		150 000	150 000
4	Electricity Bank (CH001)	2409 3103		100	100
7	Accounts receivable – KKL Publishing Service revenue (I001)	3104.1 1102		2 000	2 000
10	Advertising Bank (CH002)	2301 3103		1 000	1 000
16	Bank Service revenue (CRS)	3103 1102		3 000	3 000
22	Equipment Accounts payable – Capalaba Computers (ref # 1989)	3205 4101.1		2 000	2 000
25	Bank Capital, R Campbell (R002)	3103 5101		50 000	50 000
28	Motor vehicle Accounts payable – Kirwan Mitsubishi (ref # 199873404)	3204 4101.2		38 000	38 000
30	Land Bank (CH003)	3207 3103		51 000	51 000
31	Drawings Bank (CH004)	5101A 3103		500	500

★★ 1.46 **Accounting assumptions and concepts – explanatory paragraphs**



Write explanatory paragraphs about the relationship between the accounting entity assumption, the accounting equation, and the nature of A, L and Oe accounts. Explain how the rules of double entry are derived from the accounting equation. Use the following concept map to help you in writing your explanatory paragraphs.



★★ 1.47 **Chart of accounts, general ledger and trial balance**

See exercises
A1.27–A1.33.

Using the general journal prepared for Gerard O'Dempsey's business in exercise 1.41 on page 118, draw up a chart of accounts and general ledger, calculate working balances and take out a trial balance.

★★ 1.48 **Chart of accounts, general ledger and trial balance**

Using the general journal prepared for Ebony Berrell's business in exercise 1.42 on page 118, draw up a chart of accounts and general ledger, calculate working balances and take out a trial balance.

★★ 1.49 **Chart of accounts, general ledger and trial balance**

Using the general journal prepared for R Penhurst's business, Short Back and Sides Hair-dressing, in exercise 1.43 on page 118, draw up a chart of accounts and general ledger, calculate working balances and take out a trial balance.

★★ 1.50 **Chart of accounts, general ledger and trial balance**

Using the general journal prepared for R Bowman's business, Ritzy Résumés, in exercise 1.44 on page 119, draw up a chart of accounts and general ledger, calculate working balances and take out a trial balance.

★★ 1.51 Trial balance errors

Using the trial balance below, find the errors and amend them so it balances.

Kerry Heath (Nundah Branch)
Trial balance as at May 2009

Account no.	Account	Debit \$	Credit \$
3102	Cash in hand	2 500	
3206	Building		250 000
5101	Owner's contribution	193 724	
2410	Insurance	1 500	
3303	Loan to C Christie		4 000
3204	Motor vehicle	25 000	
1102	Service revenue	120 000	
2301	Advertising	2 250	
2201	Supplies expense		3 600
2403	Cleaning	124	
2409	Electricity	550	
4201	Bank loan		150 000
1103	Commission revenue	65 800	
3103	Bank	240 000	

★★ 1.52 Trial balance errors



Read the letter below and respond on behalf of the accountant, Marika Pathe.

3434 Northern Highway
TOWNSVILLE QLD 4870
9 March 2009

Ms Marika Pathe
Accountant
Pathe & Flutter Accountants
34 Main Street
CAIRNS QLD 4870

Dear Marika

Thanks for sorting out my books last month. I think I'm on track now. I have recorded all the transactions in the journal, and have completed the ledger and trial balance. Just one question – my trial balance is out! I can't seem to find the error no matter what I do. Can you give me an idea about what to do to find my error? I guess if I find the error and it balances, then all my recording for the month will be accurate.

Many thanks,

Felicity Roberts-Thomson

★★ 1.53 Accounting process from transactions to trial balance (no GST)

See exercise
A1.34.

The following transactions occurred for Rollover Rover Dog Washing Service in May 2009.

- a** Prepare a general journal. Number all source documents and references beginning at 001.
- b** Prepare a chart of accounts from the accounts listed in the general journal.
- c** Post the general journal to the general ledger.
- d** Calculate working balances if using T-accounts.
- e** Prepare a trial balance as at 31 May 2009.

2009

- May 1 Owner deposits \$10 000 cash in a bank account to begin the business
- 4 Bank of WWW loans the business \$40 000 in cash, which is deposited into the business's bank account
- 7 Specially modified vehicle and trailer purchased for the business for \$38 000 cash
- 10 Service fees for the week ending 10 May \$890 cash
- 11 Billed Harriet Hooper, a customer, for a service valued at \$130
- 12 Purchased a computer on credit from Rocky Computers for \$3 500 and paid a deposit of \$500
- 15 Paid cash for advertising in the *Yellow Pages* \$1 200
- 17 Service fees for the week ending 17 May \$1 200 cash
- 20 Paid wages to a part-time employee \$400 cash
- 22 Wrote cheque to pay for mobile telephone expenses \$120
- 24 Service fees for the week ending 24 May \$2 300 cash
Received a cheque for \$130 from Harriet Hooper
- 27 Paid wages to a part-time employee \$400 cash
- 31 Service fees for the week ending 31 May \$1 500 cash
Paid Rocky Computers \$1 000 in part-payment of account

★★ 1.54 Accounting process from transactions to trial balance (no GST)

Record the following transactions for Luke Lunney, a mobile hairdresser. Luke generally requires cash for his hairdressing services, but he has offered to give credit to some very regular clients who will pay him on a monthly basis.

- Prepare a general journal. Number all source documents and references beginning at 001.
- Prepare a chart of accounts from the accounts listed in the general journal.
- Post the general journal to the general ledger.
- Calculate working balances if using T-accounts.
- Prepare a trial balance as at 31 July 2009.

2009

- July 1 Luke deposits \$10 000 as capital into a bank account for his business
Luke purchases equipment on credit from Townsville Hairdressing Supplies for \$1 600
- 2 Luke borrows \$10 000 from the Waytogo Bank in order to purchase a second-hand motor vehicle from Townsville Motors valued at \$10 000. He writes out a cheque for \$10 000 to Townsville Motors and will pay monthly instalments of \$250 to Waytogo Bank on the 30th of each month.
- 7 Luke deposits the week's takings of cash from customers of \$400. He has also performed services for P Marson and W Ellison, who are regular clients. Their accounts should show the cost of services of \$20 and \$12, respectively
- 9 Luke withdraws cash of \$200 for personal use
- 11 Luke purchased a mobile phone for \$400 from Dandy Electronics. He paid cash
- 14 Luke has his trade tools maintained by Phillip Mills, with whom he has an account. The cost of this maintenance was \$120
- 15 Luke's takings for the week due to the sale of his services: cash \$340
- 18 Luke made a part-payment to Townsville Hairdressing Supplies \$400
- 22 Services: cash \$320; P Marson \$20; W Ellison \$12
- 25 Paid motor vehicle expenses of \$250 to Kirwan BP Service Station
- 29 Services: cash \$330 received
- 30 Paid monthly instalment of \$250 to Waytogo Bank

★★ 1.55 Definitions



Rewrite the definitions for the GST terms on page 65 in your own words. Display them in a tabular form for easy reference as you learn about their impact on the accounting records.

★★ 1.56 Understanding how GST works

Consider the following transactions:

- Jenny, a cotton farmer, sells raw cotton to Pete, a cotton processor, for \$220 (including \$20 GST).
- Pete uses the raw cotton to make fabric and sells it to Gerry, a fabric retailer, for \$330 (including \$30 GST).
- Gerry sells the fabric to Annaleise, a consumer, for \$440 (included \$40 GST).

Draw a graphical representation of how GST affects the supply chain, calculating:

- a** the value of sales and purchases
- b** the amount of GST that is collected
- c** how much GST is remitted to the ATO by each participant in the supply chain
- d** the total amount of GST that the government receives on the supply of the good.

★ **1.57 Understanding GST**

Research whether the following goods attract GST.

- a** Water in bottles
- b** Fruit and vegetables
- c** Restaurant food
- d** Confectionery
- e** Ice cream
- f** Biscuits
- g** Tea in a packet or coffee in a jar
- h** Tea or coffee at a restaurant
- i** Baby formula
- j** Bread
- k** Cakes bought at a bakery
- l** Breakfast cereals
- m** Flour

★ **1.58 Understanding GST**

Collect the docket from your family's next grocery shop and list 10 items that attract GST and 10 that do not. How is GST indicated on the docket?

★ **1.59 Understanding GST calculations**

Complete the missing figures in the following table. (The first one has been done for you.)

See exercises
A1.35–A1.36.

Price charged	GST (price ÷ 11 or value ÷ 10)	Value of the item
e.g. \$5 500	\$500	\$5 000
...	\$422	...
...	...	\$2 780
\$1 034	...	...
...	\$520	...
\$2 387	...	...
...	...	\$1 860

★★ **1.60 Newspaper article**



Write a short article (150 words) for a magazine distributed to owners of small businesses about the importance of keeping accurate accounting records.

★ **1.61 Research and present information about the GST**

Research the website of the Australian Taxation Office <www.ato.gov.au> and find links to the section that deals with GST. Find more information about the GST and prepare a short presentation using a data show based on five points that you found about GST that you did not know before.

For example, find out:

- What is an ABN?
- What is a BAS?
- What advice does the ATO give business regarding rounding of GST amounts?
- Which items are GST-free?

★ **1.62 Purchase of inventories**

Journalise the following transactions for Zillmere Computers, which occurred on 2 August 2009.

- a** Purchased \$40 678 worth of inventories for cash. Wrote cheque number 778.
- b** Bought \$13 970 worth of inventories on credit from Good Suppliers Ltd (ref # 5556).
- c** Notebook Computers Ltd sold us \$33 297 worth of inventories for cash (cheque 779).
- d** A supplier, PPP Ltd, sold us \$13 552 worth of inventories on credit (ref # 111).
- e** Took delivery of inventories bought on credit from our supplier, Tidwell Ltd, \$15 884 (ref # 487).

See exercise A1.37.

★ 1.63 Purchase of assets

Journalise the following transactions for Yarraman Traders, which occurred on 4 July 2009.

See exercise A1.38.

- a Purchased \$5 863 worth of equipment for cash (cheque 887).
- b Purchased \$6 644 worth of furniture on credit from Bower Ltd, ref # 09865. Paid \$664, cheque number 888, as a deposit.
- c Bought machinery which cost \$15 499 from Martine Machines Ltd on credit (ref # 154). Paid a 20% deposit with cheque number 889.
- d New England Highway Motors sold us a vehicle for \$39 996 cash (cheque 890).

Round deposit to nearest \$.

★ 1.64 Purchase of supplies and services

Journalise the following transactions for Willawong Enterprises, which occurred on 6 July 2009.

See exercise A1.39.

- a Purchased fuel for \$84.70 from Waltzing Matilda Garage, where a monthly account is held (ref # WMG 4434).
- b Paid \$121 for electricity on cheque 117.
- c Paid commercial rent of \$1 804 for the month on cheque 118.
- d Purchased replacement laser printer cartridges for \$594 on account from Laser Printer Supplies (ref # 9997).

★ 1.65 Purchases of inventories, assets, other supplies and services

Journalise the following transactions for Vincent Enterprises.

See exercise A1.40.

2009

- May 3 Purchased \$9 251 worth of inventories on credit from Black Ltd (ref # XD8874)
- 6 Paid cash (\$5 819) for furniture (cheque 11145)
- 8 Purchased \$14 113 worth of equipment on credit from APR Ltd (ref # APR1147)
- 19 Bought \$2 442 worth of inventories for cash (cheque 11146)
- 22 Charged \$286 worth of photocopying supplies to our credit account with Coopers Copiers Ltd (ref # 3354)
- 29 Paid Energex for electricity \$143 cash (cheque 11147)

★ 1.66 Purchases returns

Journalise the following transactions for Ubobo Art Cooperative.

See exercise A1.41.

2009

- July 8 Returned \$1 507 worth of inventories purchased on credit from Northern Districts Trade Supplies Ltd (ref # 056)
- Returned \$671 worth of goods purchased for cash last month and received a cash refund (receipt 0588)
- Western World Traders paid a cheque for \$649 as a refund for goods returned (receipt 0589)

★ 1.67 Cash paid to accounts payable

Journalise the following transactions for Tingalpa Timbers, which occurred on 10 July 2009.

See exercises A1.42–1.43.

- a Paid Local BP Garage Pty Ltd the amount owing in full, \$572 (cheque 640).
- b Paid cheque number 641 to A E Pie Pty Ltd, \$1 122.
- c Cheque number 642 for \$2 409 was sent to Crosier & Crosier Ltd to pay the account held with this business.
- d Wrote out cheque number 643 for \$440 to pay Pink Pages Ltd.
- e Patrick Ltd were sent cheque number 644 for \$1 848.

★ 1.68 Cash paid to accounts payable

Journalise the following transactions for Stephens Computers, which occurred on 12 July 2009.

- a Cheque number 1124 for \$682 was sent to Works for the Office.
- b Paid cheque number 1125 for \$4 180 to Tyne & Co.

★ **1.69 Purchases of assets, inventories and other supplies and services, returns of inventories and cash payments**

Blue Chip Chocolates had the following transactions for the month of April 2009.

2009

See exercise A1.44.

- | | | |
|-------|----|--|
| April | 3 | Purchased \$61 490 worth of inventories on credit from White Tulip Ltd (ref # 33)
Paid Energex cash for electricity \$418 (cheque 00447) |
| | 7 | Purchased office equipment from La Perouse Furniture Supplies for \$26 444 on credit (ref # T77896). Paid a deposit of \$1 500 (cheque 00448) |
| | 9 | Returned inventories valued at \$4 994 to White Tulip Ltd as they were recalled due to faulty processing. White Tulip Ltd sent adjustment note ref # 666 |
| | 12 | Paid White Tulip Ltd \$56 496 in settlement of account (cheque 00449) |
| | 15 | Charged delivery truck maintenance for \$847 to our credit account with Rasmussen Garage (ref # 34445) |
| | 16 | Purchased \$15 400 worth of inventories for cash (cheque 00450) |
| | 19 | Returned \$440 worth of inventories originally purchased for cash to the supplier and received a cash refund (receipt 62) |
| | 22 | Paid La Perouse Furniture Supplies the amount owing less the discount applicable (cheque 00451) |
| | 30 | Paid Rasmussen Garage the amount owing in full on cheque number 00452 |

You are required to:

- a enter the transactions into the general journal
- b post to the ledger.

★ **1.70 Sale of inventories for cash and on credit**

Journalise the following transactions for Riverview Enterprises, which occurred on 14 July.

See exercise A1.45.

- a Sold inventories (cost price \$780) for cash \$1 716 (cash register docket issued).
- b Sold inventories on credit to Kingaroy Co. for \$1 199 (cost price \$545; invoice 225).
- c Keppel Sands Resort purchased inventories on account for \$4 906 (cost price \$2 230; invoice 226).
- d Cash customer purchased inventories for \$2 871 (cost price \$1 305) and a cash register docket was issued.

★ **1.71 Sale of assets (other than inventories)**

Journalise the following transactions for Quilpie Computer Superstore, which occurred on 16 July 2009.

- a Sold, for cash, excess office equipment at its original price \$4 500 (GST inclusive) (receipt 44).
- b Sold display equipment on credit \$11 000 to Bremmer Traders Pty Ltd. The display equipment was no longer required (invoice 5567).

★ **1.72 Sale of service**

Journalise the following transactions for Proserpine Accounting Service, which occurred on 18 July 2009.

See exercise A1.46.

- a Audited books for St Mary's School and received \$770 (receipt 223).
- b Provided accounting services for a regular client, Mitchell Motors, on account. Invoiced \$407 (invoice 224).
- c Cash received for tax return preparation from a number of customers: 12 hours at \$80 per hour plus GST. Receipt numbers 225–230 were issued. Record this cash sale in total.
- d Audited accounts for Nashville Indoor Sports. Invoiced them for four hours at \$80 per hour plus GST. Invoice number 231 was issued.

★★ 1.73 Sales and sales returns

Journalise the following transactions for B & P Enterprises for the month of March. Assume all source documents begin at 222.

- Mar 1 Sold inventories for cash \$24 002 (cost price \$9 800)
 5 Customers purchased goods \$35 002 (cost price \$15 570)
 6 Cash sales returns \$2 299 (cost price \$980)
 16 C MacIntosh purchased items of inventory on account \$9 405 (cost price \$4 040)
 18 Cash sales of services \$23 804
 24 A customer who purchased goods for cash returned items that were the wrong colour. They were valued at \$1 199 (cost price \$650)
 Cash customers purchased merchandise for a total of \$25 806 (cost price \$13 900)
 28 S Usasz found that some of the goods purchased were unsuitable. She has returned them and requested an adjustment to the value of \$550 (cost price \$215)
 31 Sold merchandise on credit to Poppy Pty Ltd \$45 001 (cost price \$24 700)

★ 1.74 Sales returns

Journalise the following transactions for Oakland Parade Enterprises, which occurred on 14 September 2009.

- a** Inventories sold for cash on 1 September \$1 100 (cost price \$500) were returned. Issued cheque 911 and adjustment note # 911.
b R Eaton returned inventories worth \$957 bought on credit on 28 July (cost price \$435; adjustment note # 912).

★ 1.75 Cash received from accounts receivable

Journalise the following transactions for Nashville Traders, which occurred on 22 July 2009.

- a** A credit customer, Zepher Ltd, paid an outstanding debt of \$4 780, which was owing for goods purchased last month (receipt 11).
b Annerley Automatics paid \$1 200 owing on account with Nashville Traders (receipt 12).

★ 1.76 Credit sales and cash from accounts receivable

Journalise the following transaction for Mount Morgan Wholesalers.

2009

- July 2 Billed a credit customer, Renay Roberts, \$22 000 for goods purchased at a cost price of \$10 000 (invoice 54)
 10 Received a cheque from Renay Roberts for \$22 000 in settlement of her account (receipt 612)
 12 Sold goods for \$37 400 to Brendan Yui. The cost price of the goods sold was \$17 000 (invoice 44)
 15 Received a cheque from Brendan Yui in settlement of his account (receipt 613)

★ 1.77 Cash received for other revenues

Journalise the following transaction for Lutwyche Lights, which occurred on 24 July 2009.

- a** Received dividend on shares in Dotcom Co. \$690 (no GST is applicable; receipt 114).
b Wrote out receipt number 115 to record receipt of a cheque for \$440 from a tenant for fortnightly rental of business premises.
c A room above the shop is rented to a tenant for residential purposes. Received \$120 cash from this tenant for the week's rent. (GST is not levied on residential rents, only commercial rents; receipt 116.)

See exercises
A1.49 and A1.50.

See exercise A1.51.

★★ 1.78 Sales and returns; cash received

The following transactions occurred in Zoe Evans' business, Oakey Heating Solutions, in March 2009. Determine all source documents required and number each from 100.

- | | | |
|-----|----|--|
| Mar | 1 | Owner contributed inventories and furniture valued at \$10 000 and \$2 000, respectively. Installed heating appliance for the Mt Marvel Guesthouse on account \$2 420 (cost price \$1 100) |
| | 4 | Sold showroom display fittings that were no longer required for \$2 200 cash |
| | 5 | Customers purchased goods \$3 531 for cash (cost price \$1 605) |
| | 13 | Performed electrical checks on heaters at the Oakey District Hospital. An invoice was prepared for \$1 694 |
| | 16 | Purchased items of inventory on account \$5 500 from J Carlson Pty Ltd, Dalby |
| | 19 | Received a cheque from Mt Marvel Guesthouse in settlement of their account |
| | 24 | A customer who had purchased goods for cash returned items that were the wrong colour. They were valued at \$539 (cost price \$245) |
| | 25 | Interest from bank account is \$40 (no GST) |
| | 26 | Z Evans found that some of the goods she had purchased on March 16 were damaged. She requested an adjustment note to the value of \$363 |
| | 27 | Sold merchandise on credit to McKeering Pty Ltd for \$2 915 (cost price of goods sold is \$1 325) |
| | 29 | Received \$660 commission from Britex Elements for sales from its promotion last month |
| | 31 | McKeering Pty Ltd paid cash to settle their account |

You are required to:

- a** enter the transactions into the general journal
- b** post to the ledger
- c** take out a trial balance.

★★ 1.79 Sales of inventories, assets and services; cash received

Banksia Beach Air Conditioners had the following transactions for the month of February 2009.

See exercises
A1.47, A1.48
and A1.52.

- | | | |
|-----|----|--|
| Feb | 2 | Purchased inventories \$33 000 and furniture \$26 400 (cheque 6211) |
| | 3 | Received bank statement and noted that \$10 in interest had been received for the month of January (bank statement) |
| | 4 | Commercial tenant paid rent \$440 (receipt 54) |
| | 5 | Sold inventories to Bonnets and Bows for \$23 760 (cost price \$10 800) (invoice 331) |
| | 9 | Provided services on account for Broadmeadows Leagues Club and charged \$27 115 for this service (invoice 332) |
| | 10 | Sales to cash customers totalled \$24 420 (cost price \$11 100; CRS) |
| | 11 | Sold display furniture and fittings (at original price) \$26 400 (GST inclusive) on credit to Merry Widow Amateur Acting Guild (invoice 333) |
| | 14 | Received a cheque from Broadmeadows Leagues Club in settlement of their account (receipt 111) |
| | 20 | Merry Widow Amateur Acting Guild paid their account (receipt 112) |
| | 27 | Received a cheque from Bonnets and Bows in full payment of their account (receipt 113) |

You are required to:

- a** enter the transactions into the general journal
- b** post to the ledger
- c** take out a trial balance.

★ 1.80 Drawings by the owner – cash and inventories

See exercise A1.53.

Journalise the following transactions for Kadanga Enterprises, which occurred on 31 July 2009.

- a The owner withdrew cash of \$2 000 (cheque 66982).
- b The owner withdrew for own use goods to the value of \$1 804 (cost price \$820; memo 31/7/09).

★ 1.81 Correction of errors

Journalise the following transactions for Joyner Coffee Emporiums, which occurred on 31 July 2009.

- a The bank advised that an incorrect figure had been recorded on our deposit slip for cheque number 334423, which was a cheque received from a client, T Turvey. We had recorded a deposit of \$454 when it should have been \$554 (letter 28/7/2009).
- b In reviewing the accounting records for the business, it is found that \$9 987 has been incorrectly posted to the motor vehicle account instead of the motor vehicles expenses account. Correct this error (email from F Joyner 31/7/2009).

★ 1.82 Correction of errors

Journalise the following transactions for Jimboomba Turf Supplies, which occurred on 31 July 2009.

- a M Carr, an account receivable, has been debited with a sale of inventories for \$4 246. This was in fact an incorrect entry and the amount should have been recorded as a sale to M Carpenter for the same amount. Reverse and correct this transaction (email 30/7/2009).
- b An error was disclosed when the trial balance was prepared. A cash purchase has been recorded for \$2 486 when it should have been for \$2 882. Correct this error (memo 334).

★ 1.83 Opening entry – new business

See exercise A1.54.

L Basford, a sole trader trading as Bastille Products, opened for business on 10 November with the following asset contributions by the owner:

Equipment	\$20 000	Furniture	\$11 000
Bank	\$8 500	Machinery	\$62 000
Cash on hand	\$200		

Record these details as an opening entry in the general journal.

★ 1.84 Remitting GST to the ATO

Prepare the entry to record the remittance of \$286 of GST to the ATO by Nelson Contractors on 20 July 2009 (cheque 6213).

★ 1.85 Remitting GST to the ATO

Daniel Bodene's Coffee Emporium had the following entries in its GST clearing account. Determine the amount owing to the ATO for the month of September 2009 and prepare the entry in the general journal.

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009 4102			2009 GST clearing a/c		
Mar 3	Bank	240	Mar 1	Bank	1 500
6	Bank	520	6	Accounts receivable	
8	Bank	1 100	– J + K Ltd		5 400
9	Accounts payable		9	Bank	12 540
– P Dwyer		6 600	11	Accounts receivable	
14	Accounts payable		– J J Campbell		1 540
– A Fagan		148	14	Accounts receivable	
16	Accounts payable		– O McKenna		5 112
– A Star		620	15	Bank	8 654
19	Bank	730	16	Accounts receivable	
23	Accounts payable		– E Best		1 254
– A Casey		14	20	Bank	1 665
28	Accounts payable		26	Bank	2 120
– J Tichburn		480	29	Bank	4 147

★★★ 1.86 Comprehensive exercise

Prepare general journal entries for the following transactions for Sarah's Sarongs of Noosaville. Then post to a general ledger and take out a trial balance. All source documents begin at 200.

2009

- Mar 1 Sarah began her business with cash \$120 000, which she deposited in the bank. She also contributed equipment worth \$14 000 and a motor vehicle valued at \$19 000 to the business (no GST is applicable)
- 5 Sarah borrowed \$30 000 cash from a good friend, Mimi Clark (no GST is applicable)
- 6 Bought inventory from Vosloo Limited \$55 000
- 7 Commission received for sale of artwork displayed on premises \$440
- 8 Customers bought goods for \$33 000 cash (cost price \$15 000)
Paid \$3 500 rates for premises for the year. Cheque made out to Noosa Shire Council (no GST)
- Adam Limited sold the business items of inventory on credit for \$46 200
- 12 Charged customer \$506 for alteration services. Customer paid in cash
- 15 Purchased inventory for cash \$19 800
Purchased furniture for the business from Office Furniture Products \$55 000
Sold used furniture to office staff for \$2 200 cash
- 16 Cash sales returns \$7 480 (cost price \$3 400)
Paid electricity and gas account \$264
- 17 The owner withdrew cash \$1 500 and inventories valued at \$1 100 (cost price \$500)
- 18 J Wong purchased items of inventory on account \$10 340 (cost price \$4 700)
Items purchased on 15 March were returned to the supplier as they were faulty. A refund of \$110 was received
- 25 The cash sales returns recorded on 16 March were found to be in error. The correct amount should be \$6 600 (cost price \$3 000)
- 28 J Wong found that some of the goods she had purchased were unsuitable. She returned goods to the value of \$550 (cost price \$250)
- 31 Paid salaries for the month \$15 000 (GST is not applicable)
Paid Adam Limited the amount owing

See exercises
A1.55–A1.57.

You are required to:

- a** enter the transactions into the general journal
- b** post to the ledger
- c** take out a trial balance.

★★★ 1.87 Comprehensive exercise

M Bone begins business, MB's Uniforms, on 1 August 2009 with the following assets and liabilities: Bank \$12 530, accounts receivable: J Landon \$220 and J Sanders \$341, office furniture \$5 000, motor vehicle \$15 000, accounts payable: J Leons \$286, bank loan \$11 000, GST clearing \$120.

Tax invoices issued

Date	Inv. no.	Customer	Description	Amount	GST (incl.)	COGS
2009						
Aug 3	35	J Landon	Complete uniform	\$330.00	\$30.00	\$135.00
6	36	K Diamond	Motor vehicle	16 500.00	1 500.00	
15	37	Kenmore SHS	80 uniforms	23 000.00	2 090.91	10 454.55
24	38	Dutton Park SHS	50 uniforms	14 375.00	1 306.82	6 534.40

Tax invoices received

Date	Inv. no.	Customer	Description	Amount	GST (incl.)
2009					
Aug 2	3856	Uniform Suppliers	100 uniforms	\$15 000.00	\$1 363.64
7	AE89	Computer Sales Ltd	computer	3 300.00	300.00
15	39	Best Shoes Ltd	48 brown shoes	14 000.00	1 272.73
28	400	J Leons	30 hats	300.00	27.27

Cheque butts

Date	Chq. no.	Payable to	Description	Amount	GST (incl.)
2009					
Aug 9	332	SEQEB	Electricity	\$150.00	\$13.64
13	333	Commercial Realty	Rent	400.00	36.36
15	334	L Moon	School hats	1 800.00	163.64
17	335	M Bone	Drawings	200.00	
19	336	Best Shoes Ltd	Payment – part	4 000.00	
25	337	J Roberts	Uniforms	2 090.00	190.00

Receipts issued

Date	Rec. no.	Received from	Description	Amount
2009				
Aug 5	34	K Mines	Office furniture	\$550.00
19	35	Kenmore SHS	Payment in full	23 000.00

Cash register summary

Date	Amount	GST (incl.)	COGS
2009			
Aug 13	\$2 863.00	\$260.27	\$1 301.37
25	3 814.00	346.73	1 733.65

EFTPOS dockets

Date	Amount	GST (incl.)	COGS
2009			
Aug 5	\$209.00	\$19.00	\$95.00
17	461.00	41.91	209.55

Adjustment notes issued

Date	Adj.	Issued to	Description	Amount	GST (incl.)	COGS
2009						
Aug 5	3	J Landon	Wrong colour	\$50.00	\$4.55	\$22.73

Adjustment notes received

Date	Adj.	Received from	Description	Amount	GST (incl.)
2009					
Aug 5	365	Uniform Suppliers	Faulty goods	\$150.00	\$13.64

Additional information:

- Memo 28/8 Cheque # 335 was written for \$2 000, not \$200 as recorded. Reverse and re-enter.
- Bank statement showed bank charges of \$1 500 for August (no GST).

You are required to:

- a** enter the transactions into the general journal
- b** post to the ledger
- c** take out a trial balance.

★★★ 1.88 Comprehensive exercise

The following transactions are for Kim's Kreative Cakes. Number all source documents from 600.

2009

- Mar 5 Kimberly has the following balances in the books of her cake decorating supplies business: bank \$12 000, accounts receivable (N Griffin & Co. \$2 000, Hogan's Heroes \$3 000), premises \$120 000, accounts payable (Nigela's Cakes \$5 000), inventories \$18 000
- 8 J Knight purchased inventories for \$5 400 (cost price \$1 800)
- 11 Cash customers purchased goods \$3 800 (cost price \$2 000)
- 14 Sold goods on account \$5 000 to Hogan's Heroes (cost price \$1 580)
- Purchased stock for cash \$1 600
- 16 Received invoice from Nigela's Cakes for \$14 800
- Kimberly withdrew \$1 000 for own use
- 17 Returned goods purchased for cash on 14 March \$300
- Received \$2 200 for consultancy services to Fenton Ltd regarding a forthcoming trade expo
- 18 Returned \$400 worth of goods to Nigela's Cakes as they were unsuitable for the business
- Owner withdrew goods for her own use (cost price \$120)
- 22 Invoice sent to N Griffin & Co. for goods purchased on credit to the value of \$23 694 (cost price \$10 770)
- Paid Nigela's Cakes \$5 000 in full settlement of February account
- As a result of a windfall, Kimberly has increased her investment in the business with a contribution of cash \$50 000 and building \$400 000
- 25 Goods purchased from the business for cash were returned \$330 (cost price \$150)
- Received commission revenue of \$440 from Cakes R Us for a recent promotion of their products
- 27 Purchased on credit new equipment for business \$55 000 from Kearney Cooking Ltd. Also paid an additional \$1 100 for this asset, which includes installation of the equipment on the premises
- 29 Paid the following accounts as they were due at the end of the month: electricity \$352 and telephone \$242
- 31 N Griffin & Co. paid the amount outstanding as at 5 March
- Paid the remainder of the amount owing to Nigella's Cakes
- Kimberly received news that the \$30 000 she had applied to borrow from the bank was now available in her account
- An error was detected in the records. The entry made on 8 March was incorrect. The correct amount was \$6 400 (cost price \$2 100)

You are required to:

- a** enter the transactions into the general journal
- b** post to the ledger
- c** take out a trial balance.

★★★ 1.89 Case study

Grant Noonan's Hair I Am salon at Nundah was damaged by fire last week. Grant has been able to retrieve the information in the following journals from an accounting package file. He does not understand accounting but has a good knowledge of his business transactions. He has asked that you:

- a** analyse and interpret the following printout
- b** prepare a list of the transactions, which have been recorded in date order
- c** explain the GST paid and GST collected accounts.

Grant Noonan's Hair I Am
Purchases & payables journal

Date	ID no.	Acct no.	Account name	Debit	Credit
11-11-09	Purchase; Gresham Hair Products				
	00000001	2-1200	Trade Creditors		\$631.82
	00000001	2-1200	Trade Creditors		\$63.18
	00000001	5-1000	Supplies – Purchase	\$631.82	
	00000001	2-1330	GST Paid	\$63.18	
24-11-09	Purchase; Myer Ltd				
	00000002	2-1200	Trade Creditors		\$204.55
	00000002	2-1200	Trade Creditors		\$20.45
	00000002	6-4700	Shop Supplies	\$204.55	
	00000002	2-1330	GST Paid	\$20.45	

Sales & receivables journal

Date	ID no.	Acct no.	Account name	Debit	Credit
09-11-09	Sale; Cash				
	00000001	1-1200	Trade Debtors	\$360.91	
	00000001	1-1200	Trade Debtors	\$36.09	
	00000001	4-1100	Hair Cuts		\$40.00
	00000001	4-1150	Shampoos		\$101.82
	00000001	4-1400	Hair Products		\$219.09
	00000001	2-1310	GST Collected		\$36.09
13-11-09	Sale; Cash				
	00000002	1-1200	Trade Debtors	\$730.91	
	00000002	1-1200	Trade Debtors	\$73.09	
	00000002	4-1150	Shampoos		\$227.27
	00000002	4-1100	Hair Cuts		\$103.64
	00000002	4-1250	Perms		\$400.00
	00000002	2-1310	GST Collected		\$73.09
26-11-09	Sale; Cash				
	00000003	1-1200	Trade Debtors	\$1 334.55	
	00000003	1-1200	Trade Debtors	\$133.45	
	00000003	4-1100	Hair Cuts		\$410.91
	00000003	4-1250	Perms		\$527.27
	00000003	4-1200	Shaves		\$32.73
	00000003	4-1150	Shampoos		\$363.64
	00000003	2-1310	GST Collected		\$133.45

Cash receipts journal

Date	ID no.	Acct no.	Account name	Debit	Credit
09-11-09	Payment; Cash				
	CR000001	1-1110	Cheque Account	\$397.00	
	CR000001	1-1200	Trade Debtors		\$397.00
13-11-09	Payment; Cash				
	CR000002	1-1110	Cheque Account	\$804.00	
	CR000002	1-1200	Trade Debtors		\$804.00
26-11-09	Payment; Cash				
	CR000003	1-1110	Cheque Account	\$1 468.00	
	CR000003	1-1200	Trade Debtors		\$1 468.00



Cash disbursements journal					
Date	ID no.	Acct no.	Account name	Debit	Credit
11-11-09	Gresham Hair Products				
	1	1-1110	Cheque Account		\$695.00
	1	2-1200	Trade Creditors	\$695.00	
14-11-09	Telstra				
	2	1-1110	Cheque Account		\$250.00
	2	6-4500	Telephone	\$227.27	
	2	2-1330	GST Paid	\$22.73	
14-11-09	Peta Hawkins				
	3	1-1110	Cheque Account		\$320.00
	3	6-5130	Wages & Salaries	\$320.00	
25-11-09	Petty cash reimbursement				
	4	1-1110	Cheque Account		\$22.20
	4	6-4200	Postage	\$9.55	
	4	6-4100	Cleaning	\$6.18	
	4	6-5110	Staff Amenities	\$4.90	
	4	2-1330	GST Paid	\$1.57	

FS2

Financial reports

Determining profit/loss

- The accounting period assumption
- Profit and loss summary account
- Recording closing entries
- Transferring drawings to the capital account
- Formal balancing of accounts
- Financial reporting
- Income statement
- Determining gross profit/loss
- Balance sheet

Accrual accounting

- Cash accounting versus accrual accounting
- Balance-day adjustments
- Preparation of end-of-period reports
- Reversing entries

Analysis and interpretation of reports

- Analysis and interpretation
- Ratios
- Decision-making from ratios
- Recommended procedure for analysing and interpreting financial data

Chapter

2

Part 1 – Determining profit/loss

Already know

- How to account for revenues and expenses
- A fundamental objective of accounting information is to provide information to interested parties for decision-making purposes

Need to know

- Definition and implementation of accounting period assumptions
- Definition and implementation of the matching principle
- Preparation of closing entries and profit and loss summary
- Preparation of income statement and balance sheet

Using this knowledge

- *Helps to evaluate the performance* of a business through providing information that relates to a given period of time. The matching of revenues and expenses enables management to see how the business is performing and whether there are areas in need of improvement
- *Provides information for decision-making.* The availability of profit/loss figures on a regular basis enables managers/owners to make decisions about how the business has performed and the future direction of the enterprise

ACCOUNTING VOCABULARY

Accounting period assumption
Balance sheet
Gross profit/loss
Income statement

Matching principle
Net profit/loss
Profit and loss summary

Learning objectives

After completing this section, you should be able to:

- 1 explain the purpose of the accounting period assumption
- 2 understand the need for a profit and loss summary account
- 3 prepare closing entries and a profit and loss summary account, and balance asset, liability and owner's equity accounts
- 4 prepare a profit and loss summary account and reproduce this information as an income statement
- 5 prepare a balance sheet.

The accounting period assumption

Learning objective 1

The true profit or loss made by a business can only be determined after the liquidation of a business. However, in order to make decisions and evaluate the performance of the business, it is necessary to calculate profit (or loss) on a more

'Arbitrary' means there is no set rule that must be adhered to by a business.



regular basis. Therefore, the life of the business is divided into reporting periods for the purpose of profit determination. Reporting usually occurs at the end of the financial year which, for most (but not all) businesses in Australia, follows the taxation year – 1 July of one year to 30 June of the next year.

The **accounting period assumption** divides the life of an enterprise into arbitrary time periods.

Regular reporting is necessary for taxation purposes. Profits earned by a sole trader are subject to tax. Therefore, it is necessary to have a point in time when profit or loss is ascertained.

In addition, the owner of a business will need to know how well the business is performing and will therefore find it necessary to determine profit or loss through:

- the profit and loss summary account
- end-of-period reports (an income statement and a balance sheet).

However, the owner should constantly monitor the business's progress and will need to know more frequently than once a year how much profit is being generated. The financial reports are formally completed once a year, but informally more often, usually monthly or quarterly. These reports are known as interim reports.

A trading account and profit and loss account could also be used by a trading business instead of a profit and loss summary account. The trading account shows the profit (or loss) from the sale of inventories less the expenses involved in getting the inventories into a location and ready for sale. The profit and loss account calculates the net profit after all other revenues and expenses are considered.

Profit and loss summary account

Learning objective 2

Net profit occurs when the sales revenue and other operating revenues are greater than the cost of goods sold and other operating expenses.

Profit or loss is determined by matching the revenue earned for the period against the expenses incurred to earn the revenue for the same period (matching principle). This process ensures a better evaluation of the business's performance in that time period because only relevant revenue and expense amounts are used to calculate the profit or loss. The revenue and expense accounts in the ledger are closed off, which means the accounts have a zero balance and are ready to record the amounts incurred in the next accounting period. Information from these accounts is transferred to an internal working account called the **profit and loss summary account**. It is prepared in the general ledger and forms part of the double-entry process, which means it has a debit and a credit component.



The **profit and loss summary** is a working account used to determine the net profit (loss) of a business for the period.

The profit and loss summary account has the following structure.

Net loss occurs when the cost of goods sold and other operating expenses are greater than the sales revenue and other operating revenues.

General ledger	
Dr	Cr
Profit and loss summary account	
Records expense accounts	Records revenue accounts

or

General ledger			
Profit and loss summary account			
Records revenue accounts	Dr	Cr	Bal
Records expense accounts			Bal

The balance of the profit and loss summary account indicates a net profit has been made if revenues are greater than expenses, and a net loss if revenues are less than expenses.

Review & practice

1

- a What** is the accounting period assumption?
- b How** is profit calculated?
- c Why** is it necessary to report profit (loss) on a regular basis?
- d Who** would be interested in the financial reports of a business?

► Exercise 2.1, page 182

Recording closing entries

Learning objective 3

At the end of an accounting period, the revenue and expenses accounts are closed off by transferring the balance in the accounts to the profit and loss summary account. This process has a twofold effect:

- 1** The revenue and expense accounts have been cleared (they have a zero balance) and are now ready for the recording of transactions for the next accounting period.
- 2** The profit and loss summary account now contains all the relevant accounts to enable the profit or loss to be calculated.

All asset, liability and owner's equity accounts retain their balances as the opening balance for the next financial year.

The steps for closing accounts from ledger accounts to the profit and loss summary account are:



- Step 1** Determine which accounts are revenue accounts. These accounts will need to be debited with the difference between the Dr and Cr side of the account.
- Step 2** Determine which accounts are expense accounts. These accounts will need to be credited with the difference between the Dr and Cr side of the account.
- Step 3**
 - a** Prepare the general journal entries to debit the revenue accounts and credit the profit and loss summary account.
 - b** Prepare the general journal entries to credit the expense accounts and debit the profit and loss summary account.
- Step 4** Post the general journal entries to the ledger accounts.

The accounts on page 139 appear in the ledger of Lois Chan.

Lois Chan General ledger (extract) – T-format				Lois Chan General ledger (extract) – columnar format						
Dr	Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
	2009/10				2009/10					
	Revenues					Revenues				
		Sales a/c					Sales a/c			
					DY	Bank/Accounts receivable			315 000	315 000 Cr
		Sales returns a/c					Sales returns a/c			
DY		Bank/Accounts receivable		16 000				16 000		16 000 Dr
		Interest revenue a/c					Interest revenue a/c			
DY		Accounts payable		3 500					3 500	3 500 Cr
		Commission revenue a/c					Commission revenue a/c			
DY		Bank		1 200					1 200	1 200 Cr
		Expenses					Expenses			
		Cost of goods sold a/c					Cost of goods sold a/c			
DY		Inventories		183 000				183 000		183 000 Dr
		Advertising a/c					Advertising a/c			
DY		Bank		15 000					15 000	15 000 Dr
		Rent expense a/c					Rent expense a/c			
DY		Bank		12 000					12 000	12 000 Dr
		Wages a/c					Wages a/c			
DY		Bank		40 000					40 000	40 000 Dr

Note: DY=During year

Closing entries are recorded in the general journal. These clear all values from revenue and expense accounts and allow for the calculation of profit (loss).

Lois Chan General journal (extract)							
Date	Particulars	Account no.	Post ref	Debit \$	Credit \$		
2010							
June 30	Sales						
	Interest revenue			315 000			
	Commission revenue			3 500			
	Profit and loss summary (Closing entry)			1 200	319 700		
	Profit and loss summary						
	Sales returns			266 000			
	Cost of goods sold				16 000		
	Advertising				183 000		
	Rent expense				15 000		
	Wages				12 000		
	(Closing entry)				40 000		

After posting the general journal entries, the ledger of Lois Chan would now appear as follows (with the general journal entries highlighted).

Lois Chan General ledger (extract) – T-format						Lois Chan General ledger (extract) – columnar format					
Dr	Date	Particulars	Post ref	Amount \$	Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$	
	2009/10				2009/10						
		Revenues				Revenues					
	June 30	Profit and loss summary			June 30	Bank/Accounts receivable			315 000	315 000 Cr	
						Profit and loss summary		315 000		0	
	June 30	Bank/Accounts receivable			June 30	Sales returns a/c				16 000	
						Bank/Accounts Receivable		16 000		0	
						Profit and loss summary					
	June 30	Profit and loss summary			June 30	Interest revenue a/c					
						DY Accounts payable			3 500	3 500 Cr	
						Profit and loss summary		3 500		0	
	June 30	Profit and loss summary			June 30	Commission revenue a/c				12 000	
						Bank				0	
						Profit and loss summary		12 000			
		Expenses				Expenses					
	June 30	Inventories control			June 30	Cost of goods sold a/c				183 000	
						Inventory control		183 000		0	
						Profit and loss summary			183 000		
	June 30	Bank			June 30	Advertising a/c				15 000	
						DY Bank		15 000		0	
						Profit and loss summary					
	June 30	Bank			June 30	Rent expense a/c				12 000	
						DY Bank		12 000		0	
						Profit and loss summary			12 000		
	June 30	Bank			June 30	Wages a/c				40 000	
						DY Bank		40 000		0	
						Profit and loss summary			40 000		
	June 30	Sales returns			June 30	Profit and loss summary a/c				315 000	
		Cost of goods sold				Sales			315 000	Cr	
		Advertising				Interest revenue			3 500	318 500 Cr	
		Rent expense				Commission revenue			1 200	319 700 Cr	
		Wages				Cost of goods sold			183 000	136 700 Cr	
						Sales returns			16 000	120 700 Cr	
						Advertising			15 000	105 700 Cr	
						Rent expense			12 000	93 700 Cr	
						Wages			40 000	53 700 Cr	

If the credit side of the profit and loss summary account is greater than the debit side, a net profit has been made. If the debit side of the profit and loss summary account is greater than the credit side, a net loss has been made.

As a sole trader is entitled to all profits (losses) made by the business, any net profit (loss) made is then transferred to the capital account of the owner of the business. A net profit is transferred to the credit side of the capital account because a net profit increases the owner's equity in a business. A sole trader is also responsible for any losses a business may make; therefore, any net loss is transferred to the debit side of the capital account because a net loss decreases the owner's equity in a business.

The general journal entry to effect the transfer of Lois Chan's net profit calculated in the profit and loss summary account follows:

Lois Chan
General journal (extract)

Date 2010	Particulars	Account no.	Post ref	Debit \$	Credit \$
June 30	Profit and loss summary Capital (Transfer of net profit)	Dr Cr		53 700	53 700

Lois Chan
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Profit and loss summary a/c	
June 30	Cost of goods sold	183 000	June 30	Sales	315 000
	Sales returns	16 000		Interest revenue	3 500
	Advertising	15 000		Commission revenue	1 200
	Rent expense	12 000			
	Wages	40 000			
	Capital (net profit)	53 700			
		\$319 700			\$319 700

Lois Chan
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Profit and loss summary a/c				
June 30	Sales			315 000	315 000 Cr
	Interest revenue			3 500	318 500 Cr
	Commission revenue			1 200	319 700 Cr
	Cost of goods sold		183 000		136 700 Cr
	Sales returns		16 000		120 700 Cr
	Advertising		15 000		105 700 Cr
	Rent expense		12 000		93 700 Cr
	Wages		40 000		53 700 Cr
	Capital (net profit)		53 700		0

The capital account of Lois Chan would now appear as follows:

General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
Capital a/c					
			July 1	Balance	46 000
			June 30	Profit and loss summary	53 700
General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
	Capital a/c				
July 1	Balance			46 000	46 000 Cr
June 30	Profit and loss summary			53 700	99 700 Cr

Transferring drawings to the capital account

At the same time that net profit or loss is transferred to the owner's equity capital account, any drawings made by the owner are also transferred to the capital account. This amount is transferred to the capital account because drawings made by the owner reduce the amount of capital the owner has invested in the business.

Here are the general journal entry and ledger accounts required for transferring drawings to the capital account at the end of the accounting period:

Lois Chan General journal (extract)					
Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2010					
June 30	Capital	Dr		2 000	
	Drawings	Cr			2 000
	(Transfer entry)				

The capital and drawings accounts of Lois Chan would now appear as follows:

General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
Capital a/c					
June 30	Drawings	2 000	July 1	Balance	46 000
			June 30	Profit and loss summary (net profit)	53 700
Drawings a/c					
Sept 5	Bank	1 500	June 30	Capital	2 000
Mar 9	Bank	500			

General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
Capital a/c					
July 1	Balance			46 000	46 000 Cr
June 30	Profit and loss summary			53 700	99 700 Cr
	Drawings		2 000		97 700 Cr
Drawings a/c					
Sept 5	Bank		1 500		1 500 Dr
March 9	Bank		500		2 000 Dr
June 30	Capital			2 000	0

Formal balancing of accounts

Formal balancing is only required where T-style ledger accounts are used. Balancing occurs progressively in a three-column ledger account.

Rule: Only asset, liability and owner's equity accounts in a T-style ledger are formally balanced.

There are five steps to be carried out in the balancing of accounts:



- Step 1** Add both sides of the ledger account.
- Step 2** Take the smaller value in step 1 from the larger value.
- Step 3** Enter the result of step 2 on the smaller side and write 'Balance c/d' in the particulars column.
- Step 4** Enter the total on both sides of the ledger account.
- Step 5** On the larger side of the account (opposite to step 3) write 'Balance b/d' in the particulars column and the value of the balance in the amount column.

EXAMPLE 1

The capital account shown below needs to be balanced on 30 June 2010 to ascertain the value of the owner's capital for inclusion in the balance sheet.

Lois Chan						
General ledger (extract) – T-format						
Dr			Cr			
Date	Particulars	Amount \$	Date	Particulars	Amount \$	
2009/10			2009/10			
Capital a/c						
June 30	Drawings	2 000	July 1	Balance b/d	46 000	
	Balance c/d	97 700	June 30	Profit and loss summary (net profit)	53 700	
					<u>99 700</u>	
		<u>\$99 700</u>	July 1	Balance b/d	97 700	

Steps 2 and 3

Step 4

Step 5

The balance (or value) of the owner's capital account is \$97 700. This is the amount that would then be recorded in the financial reports.

Review & practice 2

- a What** is the difference between closing an account and balancing an account?
- b What** accounts are closed off at the end of an accounting period?
- c How** is an account closed?
- d Why** are closing entries necessary?
- e** Prepare the necessary entries for the following accounts and show how they would appear in the ledger after the closing entries had been posted.

List of accounts as at 30 June 2010

	\$
Sales	25 000
Sales returns	2 300
Service revenue	10 100
Rent revenue	4 000
Cost of goods sold	12 600
Sales commission	3 000
Delivery expenses	800

- f** Show how the following accounts would be closed off or balanced at the end of the accounting period.

Bank					
2010	Sales	30 000	2010	Wages	23 000
			DY	Drawings	4 000
Capital					
			2009	Balance c/d	51 000
Drawings					
2010	Bank	4 000			

► Exercises 2.2 to 2.8, pages 182–5

Financial reporting

Two general-purpose financial reports prepared from information contained in the general ledger are the income statement and the balance sheet.

These two financial reports provide information for decision-making purposes to interested users. Interested parties for sole trader enterprises would include the owner, taxation department, customers and lending authorities. Access to the financial information of a business is available to these interested parties through financial reports – not through the ledger.

Income statement

Learning objective 4 The net profit or loss for the year is determined through the profit and loss summary account. As this account is part of the general ledger, it is not available for external parties to view. In order to fulfil the function of providing information for interested parties to use in decision-making, a report that restates the information in the profit and loss summary is prepared at the end of the accounting period. This report is called an **income statement**.



Full classification of financial reports will be dealt with in chapter 10.

An **income statement** is a report that details all the expenses and revenues of a business and calculates the resultant profit (loss) for the period.

In order to show clearly how revenue was earned and where expenses were incurred, an income statement is generally classified (itemised into categories). The classification and display of final reports are designed to enhance understandability and comparability (between reporting periods and between like enterprises), and to aid in the interpretation of the information.

EXAMPLE 2

Below is the profit and loss summary account prepared for Opie Windley, who operates an interior design business.

Opie Windley General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Profit and loss summary a/c	
June 30	Supplies expense	100 000	June 30	Service fees	265 000
	Advertising	25 000		Interest revenue	3 500
	Rent expense	15 000		Commission revenue	1 500
	Wages	25 000			
	Capital (net profit)	105 000			

General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Profit and loss summary a/c				
June 30	Service fees			265 000	265 000 Cr
	Interest revenue			3 500	268 500 Cr
	Commission revenue			1 500	270 000 Cr
	Supplies expense		100 000		170 000 Cr
	Advertising		25 000		145 000 Cr
	Rent expense		15 000		130 000 Cr
	Wages		25 000		105 000 Cr
	Capital (net profit)		105 000		0

The same information would appear in an income statement as follows:

	A	B	C
1	Opie Windley		
2	Income statement		
3	for the year ended 30 June 2010		
4	Revenue		
5	Service fees	265000	
6	Interest revenue	3500	
7	Commission revenue	1500	270000
8	Less Expenses		
9	Supplies expense	100000	
10	Advertising	25000	
11	Rent expense	15000	
12	Wages	25000	165000
13	NET PROFIT		\$105000

The income statement simply rearranges the figures from the profit and loss summary account and classifies them into the broad categories of revenues and expenses. The presentation of the income statement as illustrated above is known as the narrative style.

Differences between the profit and loss summary account and the income statement can be summarised as shown in [2.1].

[2.1]

Profit and loss summary account:	Income statement:
• is a ledger account	• is a report
• is prepared in the general ledger	• is prepared outside the general ledger
• is part of the double-entry process	• is not part of the double-entry process
• is only available for internal use	• is available for use by external parties
• contains information in the account that is not classified	• contains information in the statement that can be classified for enhanced understandability
• is prepared only at the end of the accounting period	• is prepared at any time

Determining gross profit/loss

In the income statement for a trading firm, it is also desirable to determine whether a gross profit (loss) has been made, because the buying and selling of goods is the firm's principal operation. If the gross profit figure is small, the owner may need to make decisions such as whether to:

- increase the selling price of goods
- increase the quantity of sales by spending more on advertising
- reduce the expenses associated with buying inventories and getting them ready for sale.

Net sales equals sales less sales returns.

The gross profit figure must be at a sufficiently high level to enable other expenses to be paid while still providing the owner with an acceptable return on the capital invested (net profit).

Rule: Gross profit = Net sales – Cost of goods sold



Gross profit occurs when net sales revenue is greater than the cost of the goods sold. **Gross loss** occurs when the cost of the goods sold is greater than the net sales revenue.

EXAMPLE 3

Below is the profit and loss summary account prepared for Lois Chan.

Lois Chan General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Profit and loss summary a/c					
June 30	Cost of goods sold	183 000	June 30	Sales	315 000
	Sales returns	16 000		Interest revenue	3 500
	Advertising	15 000		Commission revenue	1 200
	Rent expense	12 000			
	Wages	40 000			
	Capital (net profit)	53 700			



Lois Chan General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
Profit and loss summary a/c					
June 30	Sales			315 000	315 000 Cr
	Interest revenue			3 500	318 500 Cr
	Commission revenue			1 200	319 700 Cr
	Cost of goods sold		183 000		136 700 Cr
	Sales returns		16 000		120 700 Cr
	Advertising		15 000		105 700 Cr
	Rent expense		12 000		93 700 Cr
	Wages		40 000		53 700 Cr
	Capital (net profit)		53 700		0

The same information above (showing gross profit) would appear as follows:

Lois Chan Income statement for the year ended 30 June 2010		
	\$	\$
Sales	315 000	
Less Sales returns	16 000	299 000
Less Cost of goods sold		183 000
GROSS PROFIT		116 000
Add Other revenue		
Interest revenue	3 500	
Commission revenue	1 200	4 700
		120 700
Less Other expenses		
Advertising	15 000	
Rent expense	12 000	
Wages	40 000	67 000
NET PROFIT		\$53 700

The sales figure less any sales returns (net sales) always appears first in the income statement because it is the main source of operating revenue for a trading enterprise.

Review & practice 3

- What** is the difference between a profit and loss summary account and an income statement?
- Who** would use the information contained in an income statement?
- How** would the information in an income statement be used by interested parties?
- Show how the following information would appear in an income statement. →

L Giles General ledger (extract) – T-format					
Dr					Cr
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
	Profit and loss summary a/c				
June 30	Cost of goods sold	98 000		Sales	210 000
	Sales returns	5 000		Interest revenue	5 600
	Rent expense	900			
	Electricity	2 100			
	Vehicle repairs	5 200			
	Capital (net profit)	104 400			
		<u>\$215 600</u>			<u>\$215 600</u>

Lois Chan General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Profit and loss summary a/c				
June 30	Sales			210 000	210 000 Cr
	Interest revenue			5 600	215 600 Cr
	Cost of goods sold		98 000		117 600 Cr
	Sales return		5 000		112 600 Cr
	Rent expense		900		111 700 Cr
	Electricity		2 100		109 600 Cr
	Vehicle repairs		5 200		104 400 Cr
	Capital (net profit)		104 400		0

► Exercises 2.9 to 2.18, pages 185–7

Balance sheet

Learning objective 5

As well as preparing an income statement that outlines the revenues and expenses of a business, a further report is prepared from the ledger that details the balances of all asset, liability and owner's equity accounts. This report is called a **balance sheet**. It is prepared after the income statement because the net profit (loss) figure calculated from the income statement is incorporated into the owner's equity section of the balance sheet.



A **balance sheet** is a financial report that shows the balances of all asset, liability and owner's equity accounts at a particular point in time.

A balance sheet can be prepared either directly from the asset, liability and owner's equity accounts that have been balanced in the ledger, or from a trial balance. A balance sheet is generally classified in order to better convey information to interested parties and to assist in the analysis of figures. In this chapter, simple classification of accounts into asset, liability or owner's equity will be sufficient for the balance sheet. The full classification of final reports will be dealt with in chapter 10. Assets are listed in order of liquidity – that is, those assets most easily converted into cash are listed first.

EXAMPLE 4

Consider the following extract from the ledger of Lois Chan.

Lois Chan General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
Assets					
			Bank a/c		
July 1	Balance b/d	45 000	DY	Payments	265 000
DY	Receipts	240 000	June 30	Balance c/d	20 000
		<u>\$285 000</u>			<u>\$285 000</u>
			Inventory control a/c		
July 1	Balance b/d	26 000	DY	Cost of goods sold	35 000
DY	Accounts payable	23 400	June 30	Balance c/d	14 400
		<u>\$49 400</u>			<u>\$49 400</u>
			Accounts receivable a/c		
July 1	Balance b/d	23 500	DY	Bank	89 600
DY	Sales	76 500	June 30	Balance c/d	18 050
	GST clearing	7 650			<u>\$107 650</u>
		<u>\$107 650</u>			
			Furniture a/c		
July 1	Balance b/d	9 600	June 30	Balance c/d	17 900
DY	Bank	8 300			<u>\$17 900</u>
		<u>\$17 900</u>			
			Land and buildings a/c		
July 1	Balance b/d	140 000	June 30	Balance c/d	140 000
		<u>\$140 000</u>			<u>\$140 000</u>
			Liabilities		
			Accounts payable a/c		
DY	Bank	48 000	July 1	Balance b/d	34 600
June 30	Balance c/d	12 600	DY	Inventories	23 400
		<u>\$60 600</u>		GST clearing	2 600
					<u>\$60 600</u>
			GST clearing a/c		
DY	Accounts payable	2 600	DY	Accounts receivable	7 650
June 30	Balance c/d	5 050			<u>\$7 650</u>
		<u>\$7 650</u>			
			Mortgage on land and buildings a/c		
June 30	Balance c/d	95 000	July 1	Balance b/d	95 000
		<u>\$95 000</u>			<u>\$95 000</u>

The entries in the bank account represent a summary of the cash received and paid.

The accounts receivable and accounts payable accounts are used to replace the individual names of debtors and creditors in the general ledger. They provide a summary of all the transactions affecting accounts receivable and payable and their balances at the beginning and end of the period.



Capital a/c

June 30	Drawings	2 000	July 1	Balance b/d	46 000
	Balance c/d	97 700			
			June 30	Profit and loss summary	53 700
		<u>\$99 700</u>			<u>\$99 700</u>

Drawings a/c

DY	Bank	2 000	June 30	Capital	2 000
		<u>\$2 000</u>			<u>\$2 000</u>

Lois Chan**General ledger (extract) – columnar format**

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
Assets					
Bank a/c					
July 1	Balance				45 000 Dr
DY	Receipts		240 000		285 000 Dr
	Payments			265 000	20 000 Dr
Inventory control a/c					
July 1	Balance				26 000 Dr
DY	Accounts payable		23 400		49 400 Dr
	Cost of goods sold			35 000	14 400 Dr
Accounts receivable a/c					
July 1	Balance				23 500 Dr
DY	Sales		76 500		100 000 Dr
	GST clearing		7 650		107 650 Dr
	Bank			89 600	18 050 Dr
Furniture a/c					
July 1	Balance				9 600 Dr
DY	Bank		8 300		17 900 Dr
Land and buildings a/c					
July 1	Balance				140 000 Dr
Liabilities					
Accounts payable a/c					
July 1	Balance				34 600 Cr
DY	Inventories			23 400	58 000 Cr
	GST clearing			2 600	60 600 Cr
	Bank		48 000		12 600 Cr
GST clearing a/c					
DY	Accounts receivable			7 650	7 650 Cr
	Accounts payable		2 600		5 050 Cr
Mortgage on land and buildings a/c					
July 1	Balance				95 000 Cr
Capital a/c					
July 1	Balance				46 000 Cr
June 30	Profit and loss summary			53 700	99 700 Cr
	Drawings		2 000		97 700 Cr
Drawings a/c					
DY	Bank		2 000		2 000 Dr
June 30	Capital			2 000	0



Net assets equals
assets less liabilities.

This information would appear in the balance sheet as follows:

	A	B	C	D
1	Lois Chan			
2	Balance sheet			
3	as at 30 June 2010			
4				
5	Assets			
6	Bank		20000	
7	Inventory control		14400	
8	Accounts receivable control		18050	
9	Furniture		17900	
10	Land and buildings		140000	210350
11	Less Liabilities			
12	Accounts payable control		12600	
13	GST clearing		5050	
14	Mortgage on land and buildings		95000	112650
15	NET ASSETS			\$97700
16	<i>Represented by</i>			
17	Owner's equity			
18	Capital	46000		
19	Add Net profit	53700	99700	
20	Less Drawings		2000	\$97700

The balance sheet is a detailed version of the accounting equation ($A - L = Oe$). As a sole trader receives all profits or incurs all losses, the link between the income statement and the balance sheet is therefore owner's equity. Note that all the accounts in the statement are represented by the final balance in the account, with the exception of the capital account. All changes to the capital accounts are detailed in the balance sheet to clearly show the link between the income statement and balance sheet and to enable a better analysis of the resulting change in owner's equity. As with the income statement, full classification of the balance sheet will be examined in chapter 10.

The third main report that is generally prepared is the cash flow statement. This will be dealt with in chapter 11.



Review & practice 4

- a What** is a balance sheet?
- b How** is the balance sheet prepared?
- c Who** would use the information contained in a balance sheet?
- d** The following have been extracted from the ledger of K Fehlberg as at 30 June 2010. How would the information appear in a balance sheet?

Accounts	Debit \$	Credit \$
Inventories	40 000	
Accounts receivable	69 000	
Office equipment	18 000	
Shopfittings	10 000	
Premises	8 000	
GST clearing		9 500
Mortgage on premises		4 600
Capital		90 000
Drawings	9 100	

The net profit for the period amounted to \$50 000.

► Exercises 2.19 to 2.25, pages 187–8

Part 2 – Accrual accounting

Already know

- Revenues are earnings from the sale of goods or services to customers
- Expenses are costs incurred in the course of providing goods or services to customers
- Profit/loss is determined by matching the revenues earned against the expenses incurred in a given period of time
- A fundamental objective of accounting information is to provide information to interested parties for decision-making purposes

Need to know

- An understanding of accrual accounting
- Why balance-day adjustments are necessary
- Preparation of balance-day adjustment entries and their impact on financial reports

Using this knowledge

- *Helps to evaluate the performance* of a business through providing information that relates to a given period of time. The use of the accrual accounting method enables a better matching of revenues and expenses and therefore presents a more accurate picture of how the business has performed
- *Provides information for decision-making.* The availability of profit/loss figures on a regular basis enables managers/owners to make decisions about the future direction of the enterprise

ACCOUNTING VOCABULARY

Accrual accounting
Accrued expenses
Accrued revenues
Balance-day adjustments
Cash accounting

Prepaid expenses
Realised revenues
Recognised revenues
Reversing entries
Unearned revenues

Learning objectives

After completing this section, you should be able to:

- 1 explain the need for accrual accounting
- 2 explain and prepare balance-day adjustments
- 3 prepare appropriate reversing entries.



Cash accounting versus accrual accounting

Learning objective 1 There are two common methods of accounting:

- cash accounting
- accrual accounting.

Cash accounting is a method of accounting in which the effects of transactions involving revenues and expenses are recorded when the cash is received or paid. This means that when credit sales and purchases occur, they are not recorded in a business's records until the cash has actually been received or paid.

In addition, cash accounting does not adhere to the matching principle, which requires that revenues and expenses that belong to the same accounting period be matched. In an attempt to comply with the matching principle and Australian Taxation Office requirements, many businesses adopt the slightly more complex, but more effective, system of accounting known as **accrual accounting**.

Accrual accounting recognises transactions and events when revenues are earned and expenses are incurred.



See page 137 for more on the matching principle.

In contrast, cash accounting would result in the \$500 revenue item not being included in the income statement because cash had not actually been received.

Using accrual accounting, a business is due to receive investment interest of \$500. The business will still include the \$500 as a revenue item. Although the revenue has not actually been received in cash, it has been *earned* as at 30 June 2009. The inclusion of the interest in the income statement will therefore accurately reflect revenue for the accounting period. This is an application of the matching principle.

Accrual accounting also requires an understanding of the terms 'recognising revenue' and 'realising revenue'. **Recognising revenue** means that, although cash may not have been received, the business's records 'recognise' the fact that the revenue has been earned. However, this revenue is not actually 'realised' until the cash is received. This is shown in the following ledger accounts. For a trading enterprise, revenue is recognised (recorded) when goods are delivered. For a service business, revenue is recognised when the service has been performed.

EXAMPLE 5

G Newton General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Accounts receivable – M Brahms					
June 23	Sales	3 000	July 4	Bank	3 000
		Revenue is recognised			Revenue is realised

G Newton General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
Accounts receivable – M Brahms					
June 23	Sales		3 000		3 000 Dr
July 4	Bank			3 000	0
			Revenue is recognised	Revenue is realised	

Balance-day adjustments

Learning objective 2

In order to carry out the matching principle, adjustments may be needed to some accounts because transactions do not always fit neatly into the accounting period. Adjustment entries in the financial records facilitate a better matching of revenue and expenses and therefore ensure a more accurate profit figure for the accounting period in question. This is essential because these final reports will be used by interested parties as a basis for future decisions about the business. By making the adjustments, the final reports are a better reflection of what has occurred in the accounting period, thereby ensuring greater relevance and reliability of the financial information.

As the name implies, **balance-day adjustments** are carried out at balance day before the preparation of the profit and loss summary account, income statement and balance sheet. Balance day is usually the end of the financial year, 30 June.



Balance-day adjustments are general journal entries made as at balance day in order to compare (match) the revenues and expenses accurately so that the profit (loss) can be determined.

There are four balance-day adjustments to be dealt with at this time:

- 1 prepaid expenses
- 2 accrued expenses
- 3 unearned revenues
- 4 accrued revenues.

Each of these will be explained and examples provided.

Review & practice 5

- a **What** are balance-day adjustments?
- b **When** are balance-day adjustments necessary?
- c **Why** is the accrual accounting method used?

Prepaid expenses



Prepaid expenses are the portion of an expense that has been paid by a business in one accounting period but will be incurred (used up) in a future accounting period.

Some common types of business expenses paid in advance (prepaid) are:

- insurance
- registration
- trade membership
- subscriptions.

These expenses are rarely paid on 1 July for the full current financial year. Therefore, adjustments are necessary for the purpose of calculating an accurate profit or loss.

Assume that on 1 January 2010, S Holmes paid \$600 for a 12-month insurance policy. The insurance account in the ledger appears as:

S Holmes
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Insurance a/c	
Jan 1	Bank	600			

S Holmes
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Insurance a/c				
Jan 1	Bank		600		600 Dr

The insurance has been paid for 12 months from 1 January 2010 until 31 December 2010. It is assumed that the accounting period ends on 30 June 2010 and balance day is therefore 30 June 2010. Any insurance paid after that date has been prepaid and relates to the next accounting period. On 30 June 2010, prepaid insurance therefore amounts to \$300. The prepaid value of \$300 is for the six months from 1 July to 31 December 2010.

The insurance account needs to be adjusted to show that, of the \$600 recorded in the account as an expense, \$300 belongs to the next accounting period and is therefore a prepaid expense. A general journal entry is necessary to effect this entry.

General journal (extract)

Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2010					
June 30	Prepaid expenses	Dr		300	
	Insurance	Cr			300
	(Balance-day adjustment)				

This entry has a twofold effect:

- The insurance account has been decreased by \$300 because only \$300 has been incurred in the current accounting period.
- A new and temporary asset account called 'prepaid expenses' has been created to reflect the \$300 paid in advance.

Rule: A prepaid expense is an asset.

If the business ceased to exist on balance day, then the amount of insurance paid in advance would be reclaimed (refunded by the insurance company). Therefore, we consider prepaid expenses to be an asset.

The posted general journal entry is highlighted in the following ledger accounts. The ledger accounts are closed off to the profit and loss summary account or balanced (if a T-ledger account) prior to the preparation of the income statement and balance sheet. The following illustrates the complete process as at 30 June 2010.

S Holmes
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Insurance a/c					
Jan 1	Bank	600	June 30	Prepaid expenses	300
				Profit and loss summary	300
		<u>\$600</u>			<u>\$600</u>
Prepaid expenses a/c					
June 30	Insurance	300	June 30	Balance c/d	300
		<u>\$300</u>			<u>\$300</u>
Jul 1	Balance b/d	300			

S Holmes
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$	
2010						
Insurance a/c						
Jan 1	Bank		600		600	Dr
June 30	Prepaid expenses			300	300	Dr
	Profit and loss summary			300	0	Dr
Prepaid expenses a/c						
June 30	Insurance		300		300	Dr

The income statement would show insurance expense of \$300 for the period. The asset account, prepaid expenses, would show a balance of \$300 in the balance sheet to reflect the insurance paid in advance.

Review & practice 6

Prepare general journal entries for each of the following balance-day adjustments:

- a** \$200 subscription paid in advance
- b** \$2 600 registration of vehicles prepaid for the next accounting period
- c** \$1 200 insurance expense has been paid, of which \$900 has been paid in advance.

Accrued expenses

Another reason for a balance-day adjustment is when an expense has been incurred but has not been paid on or before the balance day. These adjustments are known as accrued expenses. The word 'accrued' means 'owing'.



Accrued expenses are costs incurred by a business in the current accounting period that have not yet been paid.

Wages are a typical example of a business expense that may be owing on balance day. This is because balance day and pay day will not always be the same. Employees are not generally paid in advance, so wages are owed by the business to them.

Assume that during the 2009/2010 financial year, S Holmes had paid \$25 000 wages to employees. On 30 June, S Holmes still owed \$500 wages to employees for work already performed. Prior to adjustments, the wages account appears as follows:

S Holmes General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
				Wages a/c	
DY	Bank	25 000			

S Holmes General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
	Wages a/c				
DY	Bank		25 000		25 000 Dr

According to the principles of accrual accounting, the expense of \$500 for wages owing must be included in the profit calculation even though it has not been paid. The wages account needs to be adjusted to show that the total expense incurred for wages in the 2009/2010 financial year was \$25 500. A general journal entry is necessary to effect this adjustment.

General journal (extract)					
Date 2010	Particulars	Account no.	Post ref	Debit \$	Credit \$
June 30	Wages	Dr		500	
	Accrued expenses	Cr			500
	(Balance-day adjustment)				

This entry has a twofold effect:

- The wages account has been increased by \$500 because this amount has been incurred in the current accounting period for wages.
- A new and temporary liability account called 'accrued expenses' has been created to reflect the \$500 that is still owing by the business.

Rule: An accrued expense is a liability.

The posted general journal entry is highlighted below. The ledger accounts are closed off or balanced prior to the preparation of the income statement and balance sheet.

S Holmes General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Wages a/c					
June 30	Bank	25 000	June 30	Profit and loss summary	25 500
	Accrued expenses	500			
		<u>\$25 500</u>			<u>\$25 500</u>
Accrued expenses a/c					
June 30	Balance c/d	500	June 30	Wages	500
		<u>\$500</u>			<u>\$500</u>
			July 1	Balance b/d	500

S Holmes General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
Wages a/c					
June 30	Bank		25 000		25 000 Dr
	Accrued expenses		500		25 500 Dr
	Profit and loss summary			25 500	0
Accrued expenses a/c					
June 30	Wages			500	500 Cr

The income statement would now show wages expense of \$25 500 for the period. The liability account, accrued expenses, would show a balance of \$500 in the balance sheet to reflect the wages still owing.

Review & practice

7

Prepare general journal entries for each of the following balance-day adjustments:

- a** \$6 230 sales commission owing for June
- b** \$10 000 advertising expense has been incurred but not yet paid
- c** \$1 200 interest on loan is owing.

Unearned revenues

Enterprises can receive revenue before earning this revenue. When this happens, it is called **unearned revenue**.



Unearned revenue is income that has been received by a business and recorded in the current accounting period. Unearned revenues are revenues received in advance and will not be earned until a future accounting period.

Assume that on 1 May 2010, rent revenue of \$1 200 was received for three months from a tenant of S Holmes. The rent account in the ledger appears as follows:

S Holmes General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Rent revenue a/c	
			May 1	Bank	1 200

S Holmes General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Rent revenue a/c				
May 1	Bank			1 200	1 200 Cr

The rent has been received for three months from 1 May 2010 until 31 July 2010. If it is assumed that the accounting period ends on 30 June 2010 and balance day is therefore 30 June 2010, any rent received for the period after this date has not been earned in the current financial year. This amount relates to the next accounting period.

The rent account needs to be adjusted to show that, of the \$1 200 recorded in the account as a revenue, \$400 belongs to the next accounting period. Only two out of the three months' rent received belongs in the current financial year. Therefore, one-third of \$1 200 is unearned revenue. A general journal entry is necessary to effect this adjustment.

General journal (extract)					
Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2010					
June 30	Rent revenue	Dr		400	
	Unearned revenue	Cr			400
	(Balance-day adjustment)				

This entry has a twofold effect:

- The rent account has been decreased by \$400 because only \$800 has been earned in the current accounting period.
- A new and temporary liability account called 'unearned revenues' has been created to reflect the \$400 that has been received but not yet earned.

Rule: An unearned revenue is a liability.

The posted general journal entry is highlighted below. The ledger accounts are closed off or balanced prior to the preparation of the income statement and balance sheet.

S Holmes General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Rent revenue a/c					
June 30	Unearned revenue	400	May 1	Bank	1 200
	Profit and loss summary	800			
		<u>\$1 200</u>			<u>\$1 200</u>
Unearned revenues a/c					
June 30	Balance c/d	400	June 30	Rent revenue	400
		<u>\$400</u>			<u>\$400</u>
			July 1	Balance b/d	400

S Holmes General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Rent revenue a/c				
May 1	Bank			1 200	1 200 Cr
June 30	Unearned revenue		400		800 Cr
	Profit and loss summary		800		0
	Unearned revenue a/c				
June 30	Rent revenue			400	400 Cr

The income statement would now show rent revenue of \$800 for the period. The liability account, unearned revenues, would show a balance of \$400 in the balance sheet to reflect the rent revenue received in advance. Unearned revenues are classified as a liability. If the business ceased to exist after 30 June 2010, then it would have to refund this portion of the rent.

Review & practice 8

Prepare general journal entries for each of the following balance-day adjustments:

- a** \$500 commission revenue has been received in advance
- b** \$600 rent is paid one month in advance
- c** \$12 000 service revenue has been received in advance for work to be completed in July and August.

Accrued revenues

The word 'accrued' means 'owing'. In relation to this balance-day adjustment, **accrued revenues** refers to amounts of revenue owing to the business that are still outstanding on balance day. These amounts must be recognised in the current period because they have been earned although they are still to be received in cash.



Accrued revenues are revenues that have been earned in the current financial period but not yet received.

Assume that during the 2009/2010 financial year, S. Holmes received \$1 800 interest revenue on an investment. The interest revenue account in the ledger appears as follows:

S Holmes General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
	Interest revenue a/c				
			DY	Bank	1 800

S Holmes General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
	Interest revenue a/c				
DY	Bank			1 800	1 800 Cr

If it is assumed that the accounting period ends on 30 June 2010 and balance day is therefore 30 June 2010, the \$200 interest not yet received should be included in the current accounting period.

The interest revenue account needs to be adjusted to show that an additional \$200 in interest had been earned in the 2009/2010 accounting period. A general journal entry is necessary to effect this adjustment.

General journal (extract)					
Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2010					
June 30	Accrued revenues	Dr		200	
	Interest revenue	Cr			200
	(Balance-day adjustment)				

This entry has a twofold effect:

- The interest revenue account has been increased by \$200.
- A new and temporary asset account called 'accrued revenues' has been created to reflect the \$200 owing to the business.



Rule: An accrued revenue is an asset.

The posted general journal entry is highlighted below. The ledger accounts are closed off or balanced prior to the preparation of the income statement and balance sheet.

S Holmes General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
Interest revenue a/c					
June 30	Profit and loss summary	2 000	DY	Bank	1 800
		<u>\$2 000</u>	June 30	Accrued revenues	200
					<u>\$2 000</u>
Accrued revenues a/c					
June 30	Interest revenue	200	June 30	Balance c/d	200
		<u>\$200</u>			<u>\$200</u>
July 1	Balance b/d	200			

S Holmes General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
Interest revenue a/c					
DY	Bank			1 800	1 800 Cr
June 30	Accrued revenues			200	2 000 Cr
	Profit and loss summary		2 000		0
Accrued revenues a/c					
June 30	Interest revenue		200		200 Dr

The income statement would show interest revenue of \$2 000 for the period. The asset account, accrued revenues, would show a balance of \$200 in the balance sheet to reflect the interest still owing to the business.



Table [2.2] provides a summary of balance-day adjustments.

[2.2]

Type of adjustment	Explanation	General journal entry	
Prepaid expenses	Expenses paid in advance	Prepaid expense a/c Expense a/c	Dr Cr
Accrued expenses	Expenses owing	Expense a/c Accrued expenses a/c	Dr Cr
Unearned revenues	Revenues received in advance	Revenue a/c Unearned revenues a/c	Dr Cr
Accrued revenues	Revenues owing	Accrued revenues a/c Revenue a/c	Dr Cr

Review & practice 9

Prepare general journal entries for each of the following balance-day adjustments:

- a \$350 commission revenue is owing
- b a tenant is \$600 behind on their rent
- c \$200 interest revenue has been earned but not yet received.

► Exercises 2.35 to 2.37, pages 189–91

Preparation of end-of-period reports

Two methods of recording balance-day adjustments and producing financial reports are available:

- trial balance approach – prepares the end-of-period reports from an unadjusted trial balance
- worksheet approach – uses a worksheet to show the same process.

Both methods assume that the general journal entries have been completed and that the general ledger will be updated with the balance-day adjustments.

Trial balance approach

For the balance-day adjustments to have the desired impact on the final reports, some adjustments need to be made to the trial balance before the figures are recorded in the income statement and balance sheet. All balance-day adjustments involve two accounts, to reflect the changes that would be made in the general ledger:

- a revenue or expense account
- an asset or liability account.

It is suggested that the figure of the expense or revenue account affected be adjusted in pencil in the trial balance, and the asset or liability account created be written below the trial balance to ensure that it appears in the balance sheet.

EXAMPLE 6

J Oswald made balance-day adjustments to take into account the following:

- prepaid advertising expense \$150
- commission received in advance \$60
- rates incurred but not paid \$140
- interest on investment owing \$200.

These adjustments have been entered in the general journal as follows:

General journal (extract)				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Prepaid expenses	Dr	150	
	Advertising expense	Cr		150
	(Balance-day adjustment)			
	Commission revenue	Dr	60	
	Unearned revenues	Cr		60
	(Balance-day adjustment)			
	Rates	Dr	140	
	Accrued expenses	Cr		140
	(Balance-day adjustment)			
	Accrued revenue	Dr	200	
	Interest revenues	Cr		200
	(Balance-day adjustment)			

These general journal entries can be used to assist with understanding what adjustments are required in the trial balance approach.

The first entry in example 6 states that a debit in the prepaid expenses account is required (asset increasing). As no prepaid expense account appears in the list of trial balance accounts, an additional account needs to be created to effect this adjustment. The advertising expense account is to be credited. As the advertising account is an expense (debit nature), a credit entry would have the effect of decreasing the amount of advertising. Therefore, the amount of \$150 is subtracted from the trial balance figure of \$538.

The commission revenue account is to be debited by the adjustment amount. As commission is a revenue account (credit nature) a debit entry would have the effect of decreasing the account. Therefore, the amount of \$60 is subtracted from the trial balance figure of \$2 000. An unearned revenue account would need to be added to the list accounts and an amount of \$60 placed on the credit side (liability increasing).

Rates is an expense account (debit nature), so the effect of the \$140 debit adjustment is to increase the amount shown in the trial balance. As no accrued expenses account appears in the list, an account called 'accrued expenses' needs to be added and the amount of \$140 shown in the credit column (liability increasing).

An accrued revenues account also needs to be created and added to the list with an amount of \$200 in the debit column (asset increasing). Interest is a revenue account (credit nature), so a credit entry would have the effect of increasing the amount already shown. Interest revenue is increased by the \$200 adjustment figure.

These adjustments are shown on the trial balance figures as follows:

	A	B	C
1	J Oswald		
2	Trial balance as at 30 June 2010		
3			
4	Account	Debit	Credit
5		\$	\$
6	Sales		270000
7	Sales returns	560	
8	Rent revenue		300
9	Commission revenue		1940 2000
10	Interest revenue		800 600
11	Cost of goods sold	113900	
12	Delivery vehicle expenses	250	
13	Advertising expense	388 598	
14	Rates	762 622	
15	Interest expense	420	
16	Wages	23000	
17	Bank	14500	
18	Accounts receivable	12300	
19	Inventory control	14800	
20	Furniture	2300	
21	Delivery vehicle	26000	
22	Building	250000	
23	Accounts payable		14500
24	Bank loan		11000
25	Capital		161790
26	Drawings	1000	
27		\$460190	\$460190
28	Additional accounts		
29			
30	Unearned revenues		60
31	Accrued revenues	200	
32	Prepaid expenses	150	
33	Accrued expenses		140

Worksheet approach

A worksheet is a tool used to assist in the preparation of financial reports. It is not part of the accounting process, nor is it absolutely necessary to prepare one. An example of a worksheet has been included as a device to assist in the preparation of end-of-period reports.

There are advantages in using a worksheet to prepare financial reports:

- All information required for the preparation of financial reports is in one document.
- Checking for errors can occur on the worksheet before entries are made in the ledger.
- Preparation of the income statement and balance sheet can be carried out at the same time by different staff members, providing both people have a copy of the worksheet.

A typical worksheet is shown below:

[illegible]

Notes to the worksheet

- ¹ The unadjusted trial balance is prepared prior to the balance-day adjustments.
- ² Amounts of balance-day adjustments to existing accounts affected are entered from the general journal according to the posting instructions of debit or credit. Additional revenue expense accounts and balance-day adjustment accounts are created and entered as required.
- ³ This shows the adjusted trial balance amounts after balance-day adjustments have been recorded. These columns should be totalled to ensure that the double-entry process has been carried out.
- ⁴ All revenue and expense amounts from the adjusted trial balance column are entered in the appropriate debit or credit column of the income statement column.
- ⁵ All assets, liabilities and owner's equity amounts from the adjusted trial balance column are entered in the appropriate debit or credit columns of the balance sheet column.

The effects of balance-day adjustments on the amounts in the worksheet are the same as for the trial balance approach demonstrated in example 6.

EXAMPLE 7**Worksheet approach**

Assume that J Oswald makes the following balance-day adjustments using the worksheet approach:

- prepaid advertising expense \$150
- commission received in advance \$60
- rates incurred but not paid \$140
- interest on investment owing \$200.

	A	B	C	D	E	F	G	H	I	J	K
1	J OSWALD										
2	Worksheet for the year ended 30 June 2010										
3											
4		Unadjusted trial balance		Balance-day adjustments		Adjusted trial balance		Income statement		Balance sheet	
5											
6											
7		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
8	Sales		270000				270000		270000		
9	Sales returns	560				560		560			
10	Rent revenue		300				300		300		
11	Commission revenue		2000	60			1940		1940		
12	Interest revenue		600		200		800		800		
13	Cost of goods sold	113900				113900		113900			
14	Delivery vehicle expenses	250				250		250			
15	Advertising expense	538			150	388		388			
16	Rates	622		140		762		762			
17	Interest expense	420				420		420			
18	Wages	23000				23000		23000			
19	Bank	14500				14500				14500	
20	Accounts receivable	12300				12300				12300	
21	Inventories	14800				14800				14800	
22	Furniture	2300				2300				2300	
23	Delivery vehicle	26000				26000				26000	
24	Building	250000				250000				250000	
25	Accounts payable		14500				14500				14500
26	Bank loan		11000				11000				11000
27	Capital		161790				161790				161790
28	Drawings	1000				1000				1000	
29	Accrued expenses ¹				140		140				140
30	Prepaid expenses ¹			150		150				150	
31	Unearned revenues ¹				60		60				60
32	Accrued revenues ¹			200		200				200	
33	Net profit (loss) ²							133760 ²			133760 ²
34		460190	460190	550	550	460530	460530	302780	302780	321250	321250
35											
36	Verification		0		0		0		0		0

All columns should be totalled to ensure double entry has been carried out.

Notes to the worksheet

- ¹ If a general journal entry creates a new account (such as a balance-day adjustment account or a new expense or revenue account), this is shown at the end of the worksheet.
- ² The calculation of a net profit (loss) figure in the income statement column is achieved by totalling both debit and credit columns and subtracting the smaller total from the larger total.
If the credit side is greater than the debit side, a net profit has been made. This figure is recorded in the debit side of the income statement column and the credit side of the balance sheet column to reflect the general journal entry to transfer net profit to the capital account:

Profit and loss summary	Dr
Capital	Cr

If the debit side (expenses) is greater than the credit side (revenues), a net loss has been made. This figure is recorded in the credit side of the income statement column and the debit side of the balance sheet column to reflect the general journal entry to transfer net loss to the capital account:

Capital	Dr
Profit and loss summary	Cr

- ³ Verification is a check to ensure that each debit column equals its corresponding credit column.

Review & practice 10

The following list of balances has been extracted from the books of C Schultz on 30 June 2010. You are required to prepare:

- a relevant general journal entries
- b profit and loss summary account
- c income statement
- d balance sheet.

Account	Debit \$	Credit \$
Sales		49 360
Returns inwards	3 219	
Cost of goods sold	28 690	
Wages	6 480	
Insurance	300	
Inventories control	14 500	
Rent expense	400	
Cartage outwards	355	
Electricity	150	
Telephone	240	
Advertising	130	
Rent revenue		500
Capital		18 120
Land	39 425	
Drawings	380	
Accounts receivable	3 904	
Accounts payable		2 533
Mortgage		23 200
Bank		2 360
GST clearing		2 100
	<u>\$98 173</u>	<u>\$98 173</u>



Balance-day adjustments as at 30 June 2010:

- prepaid telephone expense \$100
- rent revenue received in advance \$150
- electricity prepaid \$80.

► Exercises 2.38 to 2.41, pages 191–4

Reversing entries

Learning objective 3

To complete the accrual accounting end-of-period process, reversing entries are required in the new accounting period.

After preparing final reports, and on the first day of the next accounting period, reversing entries are required to:

- reverse the balance-day adjustment entries prepared on balance day so that revenue and expense accounts are returned to their pre-adjusted state
- close the temporary asset or liability accounts that were created on balance day to adjust the revenue and expense accounts for accrual accounting purposes.

If the adjustment was originally prepaid or unearned, the reversing entry transfers the adjusted amount back into the expense or revenue account.

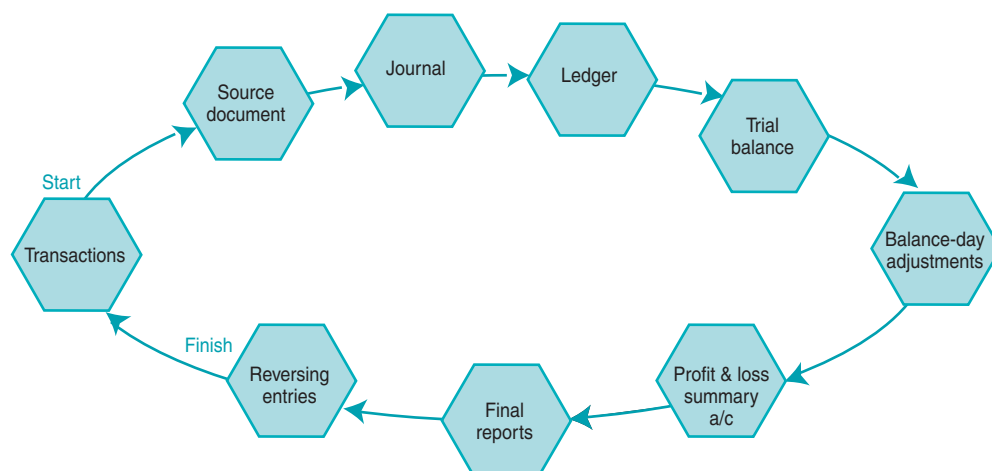
If the adjustment was accrued (owing), the reversing entry will effectively cancel the expense or revenue when it is paid or received. This ensures that such a receipt or payment is not recorded in the new financial period's reports.

There are four balance-day adjustments that require reversing entries:

- 1 prepaid expenses
- 2 accrued expenses
- 3 accrued revenues
- 4 unearned revenues.

The complete accounting process now appears as shown in [2.3] and is demonstrated in example 8.

[2.3]



EXAMPLE 8

The balance-day adjustments for Lily Shaw were as follows:

General journal (extract)					
Date 2010	Particulars	Account no.	Post ref	Debit \$	Credit \$
Jun 30	Prepaid expenses	Dr		300	
	Insurance	Cr			300
	(Balance-day adjustments)				
	Wages	Dr		500	
	Accrued expenses	Cr			500
	(Balance-day adjustments)				
	Accrued revenues	Dr		200	
	Interest revenue	Cr			200
	(Balance-day adjustments)				
	Rent	Dr		400	
	Unearned revenues	Cr			400
	(Balance-day adjustment)				

The necessary reversing entries for L Shaw are as follows:

July 1	Insurance	Dr		300	
	Prepaid expenses	Cr			300
	(Reversing entry)				
	Accrued expenses	Dr		500	
	Wages	Cr			500
	(Reversing entry)				
	Interest revenue	Dr		200	
	Accrued revenues	Cr			200
	(Reversing entry)				
	Unearned revenues	Dr		400	
	Rent	Cr			400
	(Reversing entry)				

The general ledger accounts of L Shaw after the reversing entries have been posted would appear as follows:

L Shaw General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
	Revenues				
				Interest revenue a/c	
Jun 30	Profit and loss summary	2 000	Jun 30	Bank	1 800
				Accrued revenues	200
		<u>\$2 000</u>			<u>\$2 000</u>
July 1	Accrued revenues	200			
				Rent revenue a/c	
Jun 30	Unearned revenues	400	May 1	Bank	1 200
	Profit and loss summary	800			<u>\$1 200</u>
		<u>\$1 200</u>	July 1	Unearned revenues	400

Expenses**Wages a/c**

Mar	1	Bank	25 000	Jun	30	Profit and loss summary	25 500
Jun	30	Accrued expenses	500				
			<u>\$25 500</u>				<u>\$25 500</u>
				July	1	Accrued expenses	500

Insurance a/c

Mar	1	Bank	600	Jun	30	Prepaid expenses	300
						Profit and loss summary	300
			<u>\$600</u>				<u>\$600</u>
July	1	Prepaid expenses	300				

Assets**Prepaid expenses a/c**

Jun	30	Insurance	300	Jun	30	Balance c/d	300
			<u>\$300</u>				<u>\$300</u>
July	1	Balance b/d	300	July	1	Insurance	300

Accrued revenues a/c

Jun	30	Interest revenue	200	Jun	30	Balance c/d	200
			<u>\$200</u>				<u>\$200</u>
July	1	Balance b/d	200	July	1	Interest revenue	200

Liabilities**Accrued expenses a/c**

Jun	30	Balance c/d	500	Jun	30	Wages	500
			<u>\$500</u>				<u>\$500</u>
July	1	Wages	500	July	1	Balance b/d	500

Unearned revenues a/c

Jun	30	Balance c/d	400	June	30	Rent	400
			<u>\$400</u>				<u>\$400</u>
July	1	Rent	400	July	1	Balance b/d	400



L Shaw					
General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
Revenue					
Interest revenue a/c					
Jun 30	Bank			1 800	1 800 Cr
	Accrued revenues			200	2 000 Cr
	Profit and loss summary		2 000		0
July 1	Accrued revenues		200		200 Dr
Rent revenue a/c					
May 1	Bank			1 200	1 200 Cr
Jun 30	Unearned revenues		400		800 Cr
	Profit and loss summary		800		0
July 1	Unearned revenues			400	400 Cr
Expenses					
Wages a/c					
Mar 1	Bank		25 000		25 000 Dr
Jun 30	Accrued expenses		500		25 500 Dr
	Profit and loss summary			25 500	0
July 1	Accrued expenses			500	500 Cr
Insurance a/c					
Mar 1	Bank		600		600 Dr
Jun 30	Prepaid expenses			300	300 Dr
	Profit and loss summary			300	0
July 1	Prepaid expense		300		300 Dr
Assets					
Prepaid expenses a/c					
Jun 30	Insurance		300		300 Dr
July 1	Insurance			300	0
Accrued revenues a/c					
Jun 30	Interest revenue		200		200 Dr
July 1	Interest revenue			200	0
Liabilities					
Accrued expenses a/c					
Jun 30	Wages			500	500 Cr
July 1	Wages		500		0
Unearned revenues a/c					
Jun 30	Rent			400	400 Cr
July 1	Rent		400		0

Part 3 – Analysis and interpretation of reports

Already know

- Income statement reports the profit or loss of a business for a given period
- Balance sheet shows all assets, liabilities and owner's equity of a business at a particular point in time

Need to know

- Difference between analysis and interpretation
- Definition and calculation of gross profit ratio
- Definition and calculation of net profit ratio
- Definition and calculation of return on owner's equity
- How to make decisions based on the earning capacity ratios for an enterprise

Using this knowledge

- *Provides information for decision-making.* The ratios in conjunction with benchmark figures can be used to predict trends and to influence the future direction of the enterprise
- *Helps to evaluate the performance* of a business through providing information that relates to a given period. Reports are analysed and interpreted so that decision-makers are better informed

ACCOUNTING VOCABULARY

Analysis

Gross profit ratio

Interpretation

Net profit ratio

Return on owner's equity

Learning objectives

After completing this section, you should be able to:

- 1 explain the importance of analysing financial reports and ratios
- 2 explain the gross profit ratio, net profit ratio and return on owner's equity
- 3 calculate the gross profit ratio, net profit ratio and rate of return on owner's equity
- 4 analyse and interpret the financial information contained in accounting reports.

Analysis and interpretation

Learning objective 1

The main function of accounting reports is to present information to interested parties in order to enable the evaluation of an enterprise's performance and assist in decision-making. The two final reports discussed in the previous section are designed to help fulfil these objectives. Investors and accounts payable use financial reports to assess the risks associated with an enterprise. Accounts payable are concerned with assessing the business's ability to meet its current payments as they become due and to pay long-term debts when required. Investors and owners are concerned with the profitability of a business and whether the money invested

in the business is offering the highest return in the marketplace. This section will focus on analysing the financial data and interpreting the results of the business.

In order to examine the figures in the reports and make informed decisions from the information gathered, a clear distinction has to be made between the terms 'analysis' and 'interpretation'.

Analysis

Analysis is generally an *objective* measure based on the figures presented and the calculation of various ratios and percentages. It shows the relationships between items in the end-of-period reports.

Interpretation

Interpretation is generally considered more *subjective*. It involves judgment, recommendation and decision-making based on the ratios and percentages and on additional information regarding the history and future plans for the business.

Most analysis is based on historical data. It is therefore important when interpreting data and making judgments and recommendations to be aware of any relevant changes in circumstances (such as changes in technology, competition or management) that may have affected performance or may affect future performance.

Comparative financial statements for two or more years allow trends to be identified.



Comparative financial statements show the income statements and balance sheets of a business for two or more years.

When analysing financial reports, the accountant's attention is initially drawn to significant items only. The significance of an item can be expressed as a percentage and/or a dollar value (flat figure). Although a percentage change can be used as a guide, it must be considered in conjunction with a flat figure, depending on the size of the enterprise.

If an expense account rose from \$20 to \$30, this would show as a flat figure increase of \$10, or a 50% increase. However, because the flat figure must be considered in addition to a percentage, this ensures that significance would not be attached to a small item such as this. Each enterprise will have its own guidelines about what constitutes an acceptable variance.

Auditors, in their custodial role, use this technique when assessing financial information. As a consequence of the cost factor, it is generally impractical for auditors to check every transaction in a business's records. Therefore, auditors compare last year's information with this year's and note any high or unusual variances that assist in pinpointing items that require further investigation. In addition, auditors trace a number of randomly selected transactions through the accounting process.

A ratio on its own provides little useful information. It must be categorised as 'favourable' or 'unfavourable'. This assumes there are benchmarks against which ratios are judged. Benchmarking is the practice of comparing a business to a standard set by other businesses in the same industry. Four possible benchmarks can be used to measure and interpret the ratios of an enterprise [2.4].

[2.4]

Benchmarks	Explanation
Intra-industry	Comparing the entity's ratios with ratios from other entities in the <i>same</i> industry.
Inter-industry	Comparing the entity's ratios with ratios from other entities in <i>different</i> industries.
Intra-entity	Comparing the entity's financial results <i>across periods</i> to identify trends. One application of this benchmark is a comparative income statement and balance sheet.
Arbitrary standards	Comparing the entity's financial results to standards that have been accepted by the enterprise in the past, such as investigating percentages above a set percentage and/or dollar figure.

In the light of these benchmarks, ratios can be a valuable tool for interpreting the financial reports of an enterprise.

Review & practice

11

- a What** is the difference between 'analysis' and 'interpretation'?
- b How** can reports be analysed?
- c Why** are reports analysed?
- d Who** would be interested in the analysis of the financial reports of a business?

Ratios



A **ratio** is the number of times one number contains the other number.

Ratios are important tools for financial analysis. The calculation of percentages and ratios assists decision-makers in interpreting financial reports and supports them in assessing the enterprise's:

- financial stability
- earning capacity, or profitability
- management policies.

In this section, the earning capacity or profitability of an enterprise will be examined, with further analysis carried out in chapter 12.

Earning capacity, or profitability ratios

Learning objective 2, 3

One strategy for evaluating the earning capacity of an enterprise is the calculation and analysis of the results of the profitability ratios.



The **earning capacity** of a business (profitability ratio) is the ability to earn income within the present financial structure of the enterprise.

The fundamental goal of any business is to earn a profit. These ratios play a vital role in decision-making [2.5].

[2.5]

Earning capacity (profitability ratios)	
Gross profit ratio	
Calculation	$\frac{\text{Gross profit}}{\text{Net sales}} \times \frac{100}{1}$
Purpose	<p>When considered for one year only:</p> <ul style="list-style-type: none"> measures the ability of the enterprise to pass on to customers any cost increases through increases in prices indicates the ability of the enterprise to earn an acceptable net profit indicates the ability of the enterprise to earn an acceptable return on investments. <p>When compared with previous years:</p> <ul style="list-style-type: none"> emphasises shifts in the sales mix, which could be due to changes in the number and variety of goods sold signifies any manufacturing or competitive efficiencies /inefficiencies.
High ratio implications	<ul style="list-style-type: none"> The enterprise can easily cover all of its costs. It has the capacity to earn an acceptable net profit. It has the capacity to earn an adequate return on investments.
Low ratio implications	<ul style="list-style-type: none"> The enterprise will have difficulty in covering other operating costs. An unacceptable net profit (net loss) may occur. There is a less than adequate return on investment.
Interpretative considerations	<ul style="list-style-type: none"> If the ratio is low, this may indicate an inappropriate selling price margin or high purchase costs
Net profit ratio	
Calculation	$\frac{\text{Net profit}}{\text{Net sales}} \times \frac{100}{1}$
Purpose	<ul style="list-style-type: none"> Indicates the effectiveness of managers to minimise expenses per dollar of sales.
High ratio implications	<ul style="list-style-type: none"> Operating revenues are high while operating expenses are low.
Low ratio implications	<ul style="list-style-type: none"> Selling price margin is very low. Volume of sales is very low when compared to fixed costs. Expenses are too high when compared to revenue from sales and other operating revenue. Inefficiencies are occurring.
Interpretative considerations	<ul style="list-style-type: none"> Intra-entity comparisons will assist in interpreting this ratio. This rate must be interpreted in conjunction with the gross profit ratio.
Rate of return on equity ratio	
Calculation	$\frac{\text{Net profit}}{\text{Average owner's equity}^*} \times \frac{100}{1}$
Purpose	<ul style="list-style-type: none"> Rate of return generated by an entity on investment of owner/s.
High ratio implications	<ul style="list-style-type: none"> May indicate management efficiency. Firm may be under-capitalised.
Low ratio implications	<ul style="list-style-type: none"> Could be more beneficial for the owner/s to invest elsewhere. It may indicate inefficient management or a highly capitalised, cautiously run business.
Interpretative considerations	<ul style="list-style-type: none"> Generally an enterprise would need at least a 14% return to fund future growth (depending on the industry). Rate of return should be higher than could be achieved through other forms of investment.

The return is earned on the owner's investment employed during the year. Therefore, the average of the owner's equity for the year is used to account for any changes in owner's equity. This average is calculated by adding the beginning-of-period owner's equity to the end-of-period owner's equity and dividing by two.

Review & practice 12

- a What** is meant by earning capacity?
- b Why** is the analysis of the profitability of a business important?
- c How** are the earning capacity ratios calculated?
- d Who** would be interested in the profitability ratios of a business? Why?
- e** Calculate the earning capacity ratios for each of the following:
 - i** net sales \$200 000; cost of goods sold \$120 000; other expenses \$36 000; capital \$80 000
 - ii** service revenue \$300 000; other revenue \$20 000; other expenses \$80 000; capital \$120 000; cost of services \$140 000.

► Exercise 2.48, page 195

Decision-making from ratios

Learning objective 4 When making decisions based on the ratios calculated for an enterprise, the accountant (or interested parties) will make comparisons with:

- previous years' performances and the pattern of performance for the business over that period of time.
- industry averages and predetermined standards
- other firms and industries.

Learning objectives 2, 3, 4 Whether a ratio is high or low will depend on the nature and type of the business operation.

The comparative income statement and balance sheet on page 178 illustrate how the process of analysis and interpretation can be carried out for a sole trader.

EXAMPLE 9

Nancy Searle operates a wholesale florist shop called Bloomin' Lovely and currently employs four full-time employees. She is continuing to expand her business into the corporate sector and hopes to be a major supplier of flowers and arrangements for corporate functions and offices. Nancy began the expansion and had to hire two additional staff members in 2010.

Table [2.6] shows how the earning capacity ratios for Bloomin' Lovely were calculated.

[2.6]

Ratio	Gross profit		Net profit		Rate of return on equity	
Formula	$\frac{\text{Gross profit}}{\text{Net sales}} \times \frac{100}{1}$		$\frac{\text{Net profit}}{\text{Net sales}} \times \frac{100}{1}$		$\frac{\text{Net profit}}{\text{Average owner's equity}} \times \frac{100}{1}$	
	2010	2009	2010	2009	2010	2009
Calculation	$\frac{1\,007\,200}{4\,064\,000} \times \frac{100}{1}$	$\frac{752\,500}{3\,889\,000} \times \frac{100}{1}$	$\frac{751\,200}{4\,064\,000} \times \frac{100}{1}$	$\frac{539\,100}{3\,889\,000} \times \frac{100}{1}$	$\frac{751\,200}{(5\,553\,000 + 6\,244\,200)/2} \times \frac{100}{1}$	$\frac{539\,100}{(5\,033\,900 + 5\,553\,000)/2} \times \frac{100}{1}$
Result	24.78 %	19.35 %	18.48%	13.86%	12.74%	10.18%

Bloomin' Lovely
Comparative income statement
for the years ended 30 June

	2010		2009		Increase (decrease)	Percentage change
	\$	\$	\$	\$	\$	\$
Sales						
Cash	3 320 000		3 100 000		220 000	7.10
Credit	756 000		803 000		(47 000)	(5.85)
Less Sales returns	(12 000)	4 064 000	(14 000)	3 889 000	(2 000)	(14.29)
Less Cost of goods sold		3 056 800		3 136 500	(79 700)	(2.54)
GROSS PROFIT		1 007 200		752 500	254 700	33.85
Add Other revenue						
Rent revenue	1 500		2 000		(500)	(25.00)
Commission revenue	4 200	5 700	3 600	5 600	600	16.67
		1 012 900		758 100		
Less Other expenses						
Advertising	49 000		30 000		19 000	63.34
Delivery van expenses	2 500		3 000		(500)	(16.67)
Telephone	14 000		12 000		2 000	16.67
Wages	68 000		66 000		2 000	3.03
Insurance	3 500		3 000		500	16.67
Salaries	120 000		100 000		20 000	20.00
Bad debts	4 700		5 000		(300)	(6.00)
		261 700		219 000		
NET PROFIT		\$751 200		\$539 100	212 100	39.34

Bloomin' Lovely
Comparative balance sheet
as at 30 June

	2010		2009		Increase (decrease)	Percentage change
	\$	\$	\$	\$	\$	\$
Assets						
Bank	1 500 000		1 600 000		(100 000)	(6.250)
Accounts receivable	188 000		168 000		20 000	11.905
Inventories	1 056 200		800 000		256 200	32.025
Buildings	8 000 000		7 200 000		800 000	11.111
Motor vehicle	85 000		95 000		(10 000)	(10.526)
Total assets		\$10 829 200		\$9 863 000		
Liabilities						
Accounts payable	585 000		560 000		25 000	4.464
Mortgage	4 000 000		3 750 000		250 000	6.667
Total liabilities		\$4 585 000		\$4 310 000		
Owner's equity						
Capital	5 553 000		5 033 900		519 100	10.312
Add Net profit	751 200		539 100		212 100	39.343
Less Drawings	(60 000)		(20 000)		40 000	200.000
Total owner's equity		6 244 200		5 553 000		
Total liabilities and owner's equity		\$10 829 200		\$9 863 000		

Notes to financial reports

- The increase/decrease amount is calculated by subtracting the 2009 figure from the 2010 figure (e.g. cash sales increase \$220 000 = 3 320 000 – 3 100 000).
- The percentage change is calculated by taking the increase (decrease) and dividing by the 2009 figure and then multiplying by 100 (e.g. cash sales percentage change 7.097% = 220 000/3 100 000 × 100/1).

Recommended procedure for analysing and interpreting financial data

To assist in analysing financial data, a recommended procedure follows and is applied to the financial reports of Bloomin' Lovely. Significance will be given to a variance of 10% and will be investigated only if the dollar variance is larger than \$10 000.

Application of recommended procedure to Bloomin' Lovely's reports

Step 1



Scan the variances of the **totals of each category** and then significant individual items within the reports to determine their significance. (Look for both increases and decreases greater than 10%.)

Report	Category/ Individual item	Increase (decrease)	Comments
Income statement	Gross profit	33.85%	<ul style="list-style-type: none"> Sales have increased significantly as opposed to cost of goods sold, which has decreased. This requires further investigation. Is this due to a sales price increase and/or an increase in sales due to increased advertising?
	Net profit	39.34%	<ul style="list-style-type: none"> Net profit shows an increase, but this cannot be attributed to a reduction in expenses. It is more likely to be the result of an increase in gross profit and a decrease in cost of goods sold.
	Advertising	63.34%	<ul style="list-style-type: none"> Advertising and salaries have increased significantly. This is due to the expansion program undertaken by Bloomin' Lovely over the last 12 months.
	Salaries	20.00%	
Balance sheet	Accounts receivable	11.91%	<ul style="list-style-type: none"> A significant increase in accounts receivable (11.9%) has reduced the effective inflow of cash to the business.
	Inventories	32.03%	<ul style="list-style-type: none"> Inventories have also increased significantly (32.03%), although no overdraft was procured by Nancy Searle. This has been funded in part by the increase in accounts payable.
	Buildings	11.11%	<ul style="list-style-type: none"> Buildings have increased by 11.11%. This has been funded in part by the increase in the mortgage which is in line with the expansion program.
	Drawings	200.00%	<ul style="list-style-type: none"> Although both the percentage and dollar variance are significant, the drawings are low for the level of profit recorded by the business.
	Capital	10.31%	<ul style="list-style-type: none"> This is due to the large profit figure and comparatively low drawings over the last two years.

Step 2



Draw attention to areas in which *additional* information is required.

Comment on the situation in step 2:

At this stage, Bloomin' Lovely would comment on the following points, which need further investigation:

- the purchasing policy of the enterprise, due to the build-up of inventories and no significant increase in sales
- the positive and negative aspects of the business's financial position/operations, such as sound profit growth despite an increase in expenses
- the ability of the business to fund its expansion program.

Step 3



Note any changes in the earning capacity ratios of the business. Refer to [2.6] on page 177.

Comment on the situation in step 3:

The results achieved by Bloomin' Lovely over the last two years indicate that the business is performing strongly. Both the gross profit margin and net profit margin have increased by at least 4.5 percentage points. On close examination of individual items within the statements, it can be seen that the improved performance in gross margin is due to the increase in sales while cost of goods sold has decreased. This could indicate that the business has implemented a price rise or found a cheaper supplier. The increase in return on equity also indicates that the business is in a position to fund its future growth. A comparison with industry standards should also be made if the information is available.

Summary of decision-making (recommendations)

To achieve effective decision-making and recommendations based on financial reports, procedures need to be followed. This ensures a reliable and comparable approach to the analysis and interpretation of financial reports. A summary of the procedures described in this text is shown below.



Procedures to follow

- 1 Calculate the increase/decrease for each item and percentage change if not provided.
- 2 Calculate the ratios required.
- 3 Note any significant increase/decrease over the two years.
- 4 Note any trend in any items.
- 5 Note any areas of concern.
- 6 Compare the ratios with industry averages (if available).
- 7 Make recommendations.

Understandings

- The life of the business is divided into arbitrary time periods. This is referred to as the *accounting period assumption*.
- For an accounting period, the revenues for that period must be matched against the expenses incurred in earning that revenue to obtain profit. This is called the *matching principle*.
- *Revenue* is generally recognised when it has been earned. For a service business, this occurs when the service has been performed. For a trading business, this is when the goods have been delivered.
- *Accrual accounting* is a method of accounting that recognises transactions and events when revenue is earned and expenses are incurred.
- *Balance-day adjustments* are entries made at balance day in order to match the revenues and expenses accurately so that the profit (or loss) can be determined. They also bring into account assets and liabilities not previously recorded. Common balance-day adjustments are made for accrued expenses, accrued revenues, prepaid expenses and unearned revenues.
- *Closing entries* close off in the ledger all revenue and expense accounts for the year to calculate the amount of profit or loss.
- *Asset, liability and owner's equity* accounts are balanced-off in T-form accounts to provide figures for the balance sheet and to begin a new accounting period.
- The *income statement* details the various revenues and expenses for a period and calculates the resultant profit or loss.
- All profits and losses belong to the owner. The link between the income statement and the balance sheet is therefore owner's equity.
- The income statement is a report prepared outside the ledger for distribution to interested parties. It shows details of the profit or loss for the period.
- The *balance sheet* is a detailed expression of the accounting equation for a business at a certain point of time. It is a major report that lists the various asset, liability and owner's equity items.
- At the beginning of the new accounting year, necessary reversing entries are recorded. This is to ensure that the amounts for revenues and expenses appropriate to the new year are taken into account and to close appropriate asset and liability accounts created by the balance-day adjustments.
- Reports are analysed and interpreted so that decision-makers are better informed. Analysis can usually be done in an objective way with the calculation of ratios. Interpretation is more subjective as it involves judgment, recommendations and decision-making based on these ratios.
- Financial analysis requires criteria or benchmarks against which ratios can be compared and interpretations made. These criteria may be based on past performance, past performance adjusted for changed circumstances, industry standards, predetermined or budgeted standards, or external factors such as current interest rates.
- Most analysis is based on historical data. It is therefore important when interpreting data and making judgments and recommendations to be aware of any relevant changes in circumstances (such as changes in technology, competition or management) that may have affected performance or may affect future performance.

Exercises

★ 2.1 Definitions



Briefly explain the following terms:

- a** Accounting period assumption **c** Net profit
b Matching principle **d** Net loss.

★ 2.2 Profit and loss summary account (T-style)

An extract from the ledger of B Redman for the year ended 30 June 2010 appears below.

- a** Prepare relevant closing general journal entries.
b Post the general journal entries to the ledger.
c Prepare a profit and loss summary account.

DY = During year.

B Redman General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
				Sales a/c	
			DY	Bank/Accounts receivable	542 000
				Sales returns a/c	
DY	Bank/Accounts receivable	26 500			
				Commission revenue a/c	
			DY	Bank	6 500
				Rent a/c	
			DY	Bank	45 000
				Cost of goods sold a/c	
DY	Inventories	263 500			
				Cartage outwards a/c	
DY	Bank	11 000			
				Commission expense a/c	
DY	Bank	8 500			
				Wages and salaries a/c	
DY	Bank	86 000			

S Holmes General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009/10				
	Sales a/c			
DY	Bank/Accounts receivable		542 000	542 000 Cr

Sales returns a/c				
DY	Bank/Accounts receivable	26 500	26 500	Dr
Commission revenue a/c				
DY	Accounts payable	6 500	6 500	Cr
Rent revenue a/c				
DY	Bank	45 000	45 000	Cr
Cost of goods sold a/c				
DY	Inventories	263 500	263 500	Dr
Cartage outwards a/c				
DY	Bank	11 000	11 000	Dr
Commission expense a/c				
DY	Bank	8 500	8 500	Dr
Wages and salaries a/c				
DY	Bank	86 000	86 000	Dr

★ 2.3 Profit and loss summary account

From the following information for the business of Trudy Chan as at 30 June 2010, prepare:

- a** relevant general journal entries to close off the accounts
- b** a profit and loss summary account
- c** a drawings account
- d** a capital account (formally balanced).

• Capital account balance (before transfers): \$189 500

Sales	\$1 650 000
Sales returns	23 600
Telephone expense	8 900
Rent expense	18 000
Stationery expense	6 420
Rent revenue	5 980
Advertising	25 600
Drawings (cash)	1 980
Cost of goods sold	654 800
Vehicle expenses	12 680
Interest revenue	4 960
Salaries	66 750
Delivery expenses	14 500
Electricity	8 200

★ 2.4 Account classification

Enter the accounts below into a table as illustrated on page 184. Tick the accounts that will be closed off to the profit and loss summary account and those that will be balanced at the end of an accounting period.

accounts payable	accounts receivable	advertising	bank charges
bank overdraft	buildings	cartage outwards	capital
cost of goods sold	delivery vehicle	stationery expense	drawings
commission revenue	insurance	interest revenue	interest expense
inventories	land	loan from bank	office furniture
rates	rent revenue	sales	sales returns
sales salaries	vehicle expenses		

Account	Type of account R, E, A, L, Oe	Dr/Cr nature	Closed to profit and loss summary	Balanced
Advertising	Expense	Debit	✓	

★ 2.5 Profit and loss summary account

An extract from Stockwell Enterprises' accounts revealed the following information as at 31 October 2010. You are required to prepare the profit and loss summary, capital and drawings accounts.

- **Capital account balance (as at 1 October 2010): \$67 500**

Sales	758 000
Sales returns	14 450
Commission revenue	4 500
Rates	6 565
Stationery expense	2 605
Cost of goods sold	594 700
Repairs and maintenance	3 400
Drawings (cash)	13 000
Rent revenue	1 895
Delivery expenses	13 000
Loss from theft	11 000
Wages and salaries	112 000
Commission expense	29 900
Electricity	18 600

★ 2.6 Profit and loss summary account

From the following extract of a trial balance for the business of B Lockwood, prepare:

- relevant journal entries
- profit and loss summary account
- capital and drawings accounts.

	A	B	C
1	B Lockwood		
2	Trial balance as at 30 June 2010 (extract)		
3			
4	Account	Debit	Credit
5		\$	\$
6	Sales		95800
7	Returns inwards	2160	
8	Interest revenue		1250
9	Rent		9200
10	Commission revenue		660
11	Cost of goods sold	56560	
12	Stationery expense	520	
13	Commission expense	3600	
14	Advertising	1800	
15	Salaries – office	12500	
16	Salaries – sales	1500	
17	Telephone expenses	850	
18	Bank	5600	
19	Accounts receivable	2960	
20	Inventories	22600	
21	Office equipment	13200	
22	GST clearing		3000
23	Accounts payable		2900
24	Capital		13640
25	Drawings	2600	
26		\$126450	\$126450

★ 2.7 Profit and loss summary account

From the following extract of a trial balance for the business of N Prasad, prepare:

- a relevant general journal entries
- b profit and loss accounts
- c capital and drawings accounts.

	A	B	C
1	N Prasad		
2	Trial balance as at 30 June 2010 (extract)		
3			
4	Account	Debit	Credit
5		\$	\$
7	Bank		23600
8	Salaries – sales	22600	
9	Sales		1056200
10	Sales returns	136200	
11	Buildings	265000	
12	Cartage outwards	2569	
13	Insurance	3600	
14	Rent revenue		1960
15	Drawings	15870	
16	Cost of goods sold	659230	
17	Postage expense	3600	
18	Capital		316709
19	Council rates	3600	
20	Salaries – office	13600	
21	GST clearing		2300
22	Loss from theft	1500	
23	Accounts receivable	12650	
24	Inventories	45800	
25	Office equipment	32500	
26	Mortgage on buildings		15000
27	Interest revenue		8400
28	Interest expense	16800	
29	Land	198000	
30	Accounts payable		8950
31		\$1433119	\$1433119

★★ 2.8 Profit and loss summary account

An extract from S Ashfield's accounts revealed the following information as at 30 June 2010. You are required to prepare the profit and loss summary, capital and drawings accounts.

Accounts	Debit \$	Credit \$	Accounts	Debit \$	Credit \$
Sales		1 089 987	Drawings	15 000	
Accounts payable		26 000	GST clearing		5 000
Sales returns	16 890		Accounts receivable	36 950	
Mortgage		125 000	Rent revenue		2 300
Commission revenue		23 600	Inventories	45 920	
Rates	2 460		Cost of brochures	12 530	
Land and buildings	508 732		Loss from theft	2 770	
Printing	1 600		Wages and salaries	125 690	
Bank overdraft		22 300	Shares in BHP Billiton	15 000	
Cost of goods sold	669 847		Capital		237 480
Delivery vehicles	48 600		Commission expense	3 210	
Repairs and maintenance – building	5 420		Furniture	10 030	
Vehicle repairs	8 450		Electricity	2 568	

★ 2.9 Income statement

From the following profit and loss summary account of D Liddell, prepare an income statement.

D Liddell
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Profit and loss summary a/c					
June 30	Cost of goods sold	17 492	June 30	Sales	25 835
	Sales returns	300		Commission revenue	2 148
	Cartage outwards	252		Rent revenue	3 187
	Advertising	434			
	Salaries – office	549			
	Electricity	310			
	Salaries – sales	138			
	Postage expense	256			
	Interest expense	217			
	Capital (net profit)	11 222			
		<u>\$31 170</u>			<u>\$31 170</u>

D Liddell
General ledger (extract) – columnar format

Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
Profit and loss summary a/c					
June 30	Sales			25 835	25 835 Cr
	Commission revenue			2 148	27 983 Cr
	Rent revenue			3 187	31 170 Cr
	Cost of goods sold		17 492		13 678 Cr
	Sales returns		300		13 378 Cr
	Cartage outwards		252		13 126 Cr
	Advertising		434		12 692 Cr
	Salaries – office		549		12 143 Cr
	Electricity		310		11 833 Cr
	Sales – salaries		138		11 695 Cr
	Postage expense		256		11 439 Cr
	Interest expense		217		11 222 Cr
	Capital (net profit)		11 222		0

★ **2.10 Profit and loss summary account and income statement**



Compare and contrast the profit and loss summary account and the income statement.

★ **2.11 Profit and loss summary account and income statement**



Explain, in paragraph format, why a business would prepare both a profit and loss summary account and an income statement.

★ **2.12 Income statement**

Using the profit and loss summary account prepared for B Redman in exercise 2.2 on pages 182–3, prepare an income statement.

★ **2.13 Income statement**

Using the profit and loss summary account prepared for Trudy Chan in exercise 2.3 on page 183, prepare an income statement.

★ **2.14 Income statement**

Using the profit and loss summary account prepared for Stockwell Enterprises in exercise 2.5 on page 184, prepare an income statement.

★ 2.15 **Income statement**

Using the profit and loss summary account prepared for B Lockwood in exercise 2.6 on page 184, prepare an income statement.

★ 2.16 **Income statement**

Using the profit and loss summary account prepared for N Prasad in exercise 2.7 on page 185, prepare an income statement.

★ 2.17 **Income statement**

Using the profit and loss summary account prepared for S Ashfield in exercise 2.8 on page 185, prepare an income statement.

★ 2.18 **Gross profit/loss**

What is the purpose of reporting gross profit or loss for a trading enterprise?

★ 2.19 **Balance sheet**

Using the following balances of T Livingstone, prepare a balance sheet.

T Livingstone
Account balances as at 30 June 2009

Accounts	Debit \$	Credit \$
Accounts payable		16 900
Accounts receivable	20 400	
Buildings	60 000	
Capital		79 800
Bank	9 200	
Furniture	10 000	
GST clearing		6 300
Patents	30 000	
Inventories	51 000	
Mortgage on building		80 000
Sales vehicle	16 875	

Additional information:

- Net profit as at 30 June 2009 was \$14 475.

★ 2.20 **Balance sheet**

From the following balances of C Oldham, prepare a balance sheet.

	A	B	C
1	C Oldham		
2	Balances as at 30 June 2009		
3			
4	Account	Debit	Credit
5		\$	\$
6	Buildings	90000	
7	Capital		91050
8	Bank	13287	
9	Drawings	3700	
10	GST clearing		2600
11	Equipment	15490	
12	Accounts receivable – G Emery	380	
13	Furniture	12860	
14	Shares	1500	
15	Accounts receivable – L Greel	420	
16	Inventories	14000	
17	Land	55000	
18	Loan		33000
19	Accounts payable – W McDougall		659
20	Mortgage on land		72400
21	Motor vehicle	27500	
22	Accounts payable – R Pengelly		3278
23	Accounts payable – F Grace		5300

Additional information:

- Net profit as at 30 June 2009 was \$25 850.

★ 2.21 Financial reports

Abdul Mahmed is the owner/operator of King's Kebabs in Ipswich. He has approached the Ipswich City Bank for a small loan. The bank has requested that Abdul submit his income statement and balance sheet for the previous year before it can proceed with the loan application. Explain to Abdul why the bank would require this information. Give specific examples of information within the reports that would be of particular interest to the bank.

★★ 2.22 Balance sheet

Prepare a balance sheet from information supplied for B Lockwood in exercise 2.6 on page 184.

★★ 2.23 Balance sheet

Prepare a balance sheet from information supplied for N Prasad in exercise 2.7 on page 185.

★★ 2.24 Balance sheet

Prepare a balance sheet from information supplied for S Ashfield in exercise 2.8 on page 185.

★★ 2.25 Financial reports

Van Pham is a plumber in Rockhampton. He has presented you with the following information as at 30 June 2010 and requested that you prepare an income statement and a balance sheet.

Accounts payable	\$15 000	Interest expense	\$2 000
Accounts receivable	2 000	Land	25 000
Bank	3 500	Rates	1 500
Building	65 000	Salary expense	32 000
Electricity	4 000	Service revenue	134 000
Equipment	6 000	Supplies	18 000
GST clearing (Cr)	2 000	Vehicles	42 000

- Van Pham's capital was \$53 000 as at 1 July 2009.
- He withdrew \$3 000 for personal use during the year.

★ 2.26 Cash accounting



Explain what is meant by cash accounting.

★ 2.27 Accrual accounting



What are the advantages of using an accrual accounting system?

★ 2.28 Balance-day adjustments



- What is the purpose of making adjusting entries?
- Why are adjusting entries made at the end of the accounting period and not during the period?

★ 2.29 Cash versus accrual accounting



Distinguish accrual accounting from cash accounting.

★ 2.30 Prepaid expenses

Show the general journal entries necessary for the following balance-day adjustments. Assume balance day is 30 June 2010.

- Insurance of \$1 000 is prepaid.
- Rates of \$300 for three months are paid on 1 May 2010.
- Rent of \$400 is paid for one month on 15 June 2010.
- Three months' advertising totalling \$150 is paid on 1 June 2010.
- Quarterly rental of \$120 for the telephone is paid on 1 May 2010.

★★ 2.31 Accrued expenses

Show the general journal entries necessary for the following balance-day adjustments. Assume balance day is 30 June 2010.

- a** Wages of \$253 have been earned but not paid.
- b** Overdue rent expense is \$320.
- c** Sales during June amounted to \$1 000. Commission of 10% of sales is yet to be paid to sales personnel for the month of June.
- d** A firm pays wages of \$2 000 on a weekly basis (five-day working week). Two days' pay is still owing as at 30 June 2010.
- e** The business has a bank loan of \$4 800. Interest at 5% per annum is due to be paid on the 15th of each month. The last payment was made on 15 June 2010.

★★ 2.32 Unearned revenues

Show the general journal entries necessary for the following balance-day adjustments. Assume balance day is 30 June 2010.

- a** Commission of \$190 has been received but is not yet earned.
- b** A cheque for rent of \$530 has been received. Only \$265 of this relates to the current accounting period.
- c** Rent of \$450 has been received for the months of May, June and July.
- d** Commission revenue of \$375 has been received for the three months beginning 1 June 2010.
- e** Monthly rent of \$400 was received on 15 June 2010 in payment of a month's rent from that date.

★★ 2.33 Accrued revenues

Show the general journal entries necessary for the following balance-day adjustments. Assume balance day is 30 June 2010.

- a** Commission of \$261 has been earned but not yet received.
- b** The business's tenant has not yet paid \$300 for rent owing to 30 June.
- c** Commission is paid to the business by a supplier at the rate of 5% on sales. Sales during June amounted to \$10 000 but commission has not yet been received.
- d** The business has yet to receive 5% interest per annum paid monthly on an investment of \$24 000 for the month of June.

★ 2.34 Balance-day adjustments

Enter the following balance-day adjustments into the general journal of L Reflex. Assume balance day is 30 June 2010.

- a** Prepaid insurance expense is \$200.
- b** Rent revenue received in advance is \$317.
- c** Accrued wages expense is \$6 000.
- d** Rent expense of \$200 is prepaid.
- e** Commission revenue of \$2 600 has been earned but not yet received.
- f** Telephone expense of \$35 has been prepaid.

★★ 2.35 Balance-day adjustments

Show the general journal entries necessary for the following balance-day adjustments. Assume balance day is 30 June 2010.

- a** Rent earned but not yet received is \$230.
- b** Commission received in advance is \$218.
- c** Wages to be paid are \$2 300.
- d** Amount of \$210 of the electricity bill has been prepaid.
- e** Rent of \$1 200 was received on 1 May 2010 for a four-month period. Half of the amount received belongs to the next accounting period.
- f** On 1 June 2010, the business paid \$300 to a newspaper for advertising for the two months of June and July 2010.
- g** Weekly wages of \$5 000 are paid for a five-day working week. Three days are owed for the last week of June 2010.

★★★ 2.36 Balance-day adjustments

Show the general journal entries necessary for the following balance-day adjustments. Assume that balance day is 30 June 2010 and figures given are GST exclusive.

- a** Commission yet to be received \$300.
- b** Wages owing \$1 200.
- c** Stationery paid for but not yet used \$220.
- d** Subscriptions paid by the business for trade magazines in advance \$400.
- e** Insurance of motor vehicles \$2 280 was paid on 1 March for a 12-month period.
- f** Commercial rent of \$2 400 per month is received on a six-monthly basis. The last rent received was on 30 April 2010.
- g** Wages of \$5 400 are paid weekly for a six-day working week every Wednesday. Balance day falls on the Friday.
- h** Interest of 11% per annum is charged on a monthly basis on a loan for \$60 000. The last payment was made on 1 June 2010.

★★ 2.37 Balance-day adjustments

An extract from the ledger of K Coren is given below, together with the balance-day adjustments required.

- a** Prepare general journal entries to effect the balance-day adjustments.
- b** Post general journal entries to the ledger.
- c** Prepare general journal entries to close off accounts.
- d** Close off or balance ledger accounts.
- e** Prepare a balance sheet extract showing the balance-day adjustments accounts.

K Coren General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
				Commission revenue a/c	
				DY Entries to date	2 300
				Rent revenue a/c	
				DY Entries to date	4 000
				Delivery vehicle expenses a/c	
DY	Entries to date	1 328			
				Electricity expense a/c	
DY	Entries to date	320			
				Insurance expense a/c	
DY	Entries to date	600			
				Rates expense a/c	
DY	Entries to date	560			
				Rent expense a/c	
DY	Entries to date	538			
				Wages and salaries a/c	
DY	Entries to date	3 290			

K Coren General ledger (extract) – columnar format					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009/10					
	Commission revenue a/c				
DY	Entries to date			2 300	Cr

Rent revenue a/c

DY	Entries to date	4 000	Cr
----	-----------------	-------	----

Delivery vehicle expenses a/c

DY	Entries to date	1 328	Dr
----	-----------------	-------	----

Electricity expense a/c

DY	Entries to date	320	Dr
----	-----------------	-----	----

Insurance expense a/c

DY	Entries to date	600	Dr
----	-----------------	-----	----

Rates expense a/c

DY	Entries to date	560	Dr
----	-----------------	-----	----

Rent expense a/c

DY	Entries to date	538	Dr
----	-----------------	-----	----

Wages and salaries a/c

DY	Entries to date	3 290	Dr
----	-----------------	-------	----

Balance-day adjustments as at 30 June 2010:

- Commission of \$400 has been earned but not yet received.
- Rent of \$210 has been received but not earned.
- Delivery vehicle expenses include \$315 registration that has been paid in advance.
- Amount of \$100 of the electricity expense has been prepaid.
- Insurance premium has been paid for 12 months from 1 January 2010.
- Amount of \$60 of the rates expense has been prepaid.
- Rent of \$60 is owed by the business.
- An additional wages expense of \$520 has been incurred but not paid.

★★ 2.38 End-of-year reports incorporating balance-day adjustments

The following list of balances has been extracted from the books of R Powell on 30 June 2010. You are required to prepare:

- a relevant general journal entries
- b profit and loss summary account
- c income statement
- d balance sheet.

	A	B	C
1	Account	Debit	Credit
2		\$	\$
3	Capital		161600
4	Bank	87500	
5	Insurance	4200	
6	Electricity	1400	
7	Accounts payable		36000
8	Cost of goods sold	185500	
9	Drawings	13800	
10	Accounts receivable	27000	
11	Sales		285800
12	Returns inwards	2000	
13	Telephone	1000	
14	Motor vehicle	20000	
15	Stationery expenses	1600	
16	Rent expense	4900	
17	Interest expense	3000	
18	GST clearing		2400
19	Bad debts	3800	
20	Mortgage		50000
21	Land	50000	
22	Delivery expenses	2100	
23	Rates	1500	
24	Salaries – office	30000	
25	Salaries – sales	45000	
26	Equipment	15000	
27	Inventories	24000	
28	Fixture and fittings	12500	
29		\$535800	\$535800

Other information as at 30 June 2010:

- Accrued rent expense is \$90.
- Prepaid interest expense is \$50.
- Commission revenue earned but not received is \$100.

★★ 2.39 End-of-year reports incorporating balance-day adjustments

The following list of balances has been extracted from the books of C Wessel on 30 June 2010.

You are required to prepare:

- relevant general journal entries
- profit and loss summary account
- income statement
- balance sheet.

Account	Debit \$	Credit \$
Accounts receivable	189 500	
Sales		321 500
Buildings	120 400	
Mortgage		100 400
Cartage outwards	600	
Capital		185 000
Bank	123 550	
Inventories	63 000	
Accounts payable		17 220
Cost of goods sold	50 981	
Returns from customers	6 000	
Drawings	619	
GST clearing		4 500
Travel expense	400	
Commission revenue		790
Insurance	900	
Land	25 000	
Loan		76 000
Light and power	250	
Motor vehicle	15 000	
Bad debts	4 100	
Office furniture	20 000	
Equipment	8 000	
Rent revenue		12 000
Rent expense	4 110	
Wages	20 000	
Plant and equipment	65 000	
	<u>\$717 410</u>	<u>\$717 410</u>

Balance day adjustments as at 30 June 2010:

- Amount of \$76 of cartage outwards is prepaid.
- Insurance expense is paid for the quarter beginning 1 June.
- Accrued rent expense is \$200.
- Rent received in advance is \$1 000.
- Commission revenue earned but not received is \$200.

★★ 2.40 End-of-year reports incorporating balance-day adjustments

The following list of balances has been extracted from the books of C Ryan on 30 June 2010.

You are required to prepare:

- relevant general journal entries
- profit and loss summary account
- income statement
- balance sheet.

Account	Debit \$	Credit \$
Cost of goods sold	28 870	
Commission revenue		6 000
Bank	170 509	
Telephone	145	
Land	29 000	
Patents	6 000	
Advertising	278	
Sales		235 000
Inventories	46 000	
Building	120 000	
Sales returns	4 709	
Bad debts	982	
Donations	284	
Motor vehicle	10 000	
Accounts receivable	110 025	
Insurance	900	
Rates	410	
Interest revenue		800
Rent expense	4 000	
Delivery expenses	150	
Cost of printing	170	
Rent revenue		6 700
Consultancy fees revenue		410
Commission expense	418	
Office salaries	9 200	
Accounts payable		16 510
Shares	4 000	
Interest expense	120	
Loan		33 000
Mortgage		186 400
Drawings	250	
Capital		71 700
Furniture	10 000	

Balance-day adjustments as at 30 June 2010:

- Amount of \$42 of the telephone expenses relates to the next accounting period.
- Interest revenue of \$150 has been earned but not received.
- Rent revenue of \$160 has been received before it has been earned.
- Advertising expense of \$100 has been incurred but not paid.
- Office salaries expense incurred but not paid is \$1 500.

★★★ 2.41 **Complete accounting process**

S Bott commenced business with the following assets, liabilities and owner's equity accounts on 1 June 2010:

Assets	\$	Liabilities	\$
Bank	9 700	Accounts payable – J Ohmsen	250
Accounts receivable – C Boundy	200	Bank loan	5 000
Accounts receivable – L Michaels	300		
Inventories	12 450		
Furniture	5 000	Owner's equity	
Land	30 000	Capital	52 400

Transactions for June 2010:

2010

- June 1 Sold inventories to C Boundy for \$231 (cost price \$105)
Paid rent of \$3 300
- 3 Cash purchases of inventories \$5 390
- 5 Cash sales \$2 530 (CP \$1 150)
EFTPOS sales \$66 (CP \$30)
- 7 Purchased inventories from J Ohmsen for \$352
Sold inventories to F Connolly for \$583 (CP \$265)
Returned faulty inventories to J Ohmsen worth \$33
- 8 Purchased furniture from Coulson Pty Ltd worth \$2 200
- 12 C Boundy paid outstanding account in full
F Connolly returned inventories to the value of \$44 (CP \$21)
- 15 Paid J Ohmsen in full
S Bott withdrew goods with a cost price of \$200 (GST exclusive)
- 16 Cash sales \$3 520 (CP \$1 600)
Cash purchases of inventories \$330
- 23 S Bott withdrew \$150
- 26 Received \$550 commission
Paid wages of \$1 200
- 28 Sold furniture for cash \$605
- 29 K Lynham sold goods to S Bott for \$275

Balance-day adjustments as at 30 June 2010:

- Rent expense prepaid is \$2 000.
- Commission of \$100 received but not earned.
- Wages owing is \$400.
- Interest earned but not received is \$32.

Use the information shown above for the business of S Bott to complete the following:

- a Prepare all relevant general journal entries.
- b Post the general journal entries to the ledger.
- c Prepare a trial balance.
- d Carry out balance-day adjustments.
- e Prepare a profit and loss summary account.
- f Adjust the trial balance.
- g Prepare an income statement.
- h Prepare a balance sheet.

★ **2.42 Reversing entries – prepaid expenses**

Complete the reversing entries in the general journal for the transactions completed for exercise 2.30 on page 188.

★ **2.43 Reversing entries – accrued expenses**

Complete the reversing entries in the general journal for the transactions completed for exercise 2.31 on page 189.

★ **2.44 Reversing entries – unearned revenues**

Complete the reversing entries in the general journal for the transactions completed for exercise 2.32 on page 189.

★ **2.45 Reversing entries – unearned revenues**

Complete the reversing entries in the general journal for the transactions completed for exercise 2.33 on page 189.

★ **2.46 Reversing entries – balance-day adjustments**

Complete the reversing entries in the general journal for the transactions completed for exercise 2.34 on page 189.

★★ 2.47 Reversing entries

What would be the result of failing to carry out reversing entries?

★ 2.48 Earning capacity ratios

Explain each of the earning capacity ratios.

★ 2.49 Analysis of variances

Complete the variance and percentage columns in the following financial reports and outline any variances considered significant. Items with a variance greater than 5% and more than \$500 000 are deemed to be significant.

B Cosmos
Income statement for the year ended 30 June

	2010	2009	Increase (decrease)	Change
	\$000	\$000	\$000	%
Sales				
Cash	540	747		
Credit	16 544	15 933		
Total net sales	17 084	16 680		
<i>Less</i> Cost of goods sold	1 916	1 444		
Gross profit	15 168	15 236		
<i>Less</i> Other expenses				
Advertising	500	400		
Sales staff motor vehicle expenses	360	20		
Rent	5 000	3 200		
Insurance	400	1 290		
Rates	1 000	760		
Salaries	2 000	2 000		
Telephone	70	69		
Bad debts	400	310		
Total expenses	9 730	8 049		
Net profit	\$5 438	\$7 187		

B Cosmos
Balance sheet as at 30 June

	2010	2009	Increase (decrease)	Change
	\$000	\$000	\$000	%
Assets				
Bank	613	569		
Accounts receivable	2 738	2 250		
Inventories control	2 047	1 979		
Motor vehicles	207	142		
Buildings	6 890	5 698		
Land	4 600	3 400		
Furniture	76	80		
Plant and equipment	1 200	1 400		
Shares	1 761			
Total assets	\$20 132	\$15 518		
Liabilities				
Accounts payable	3 913	3 870		
Accrued expenses	1 442	1 510		
Mortgage	2 506	3 305		
Total liabilities	7 861	8 685		
Owner's equity				
Capital	6 833	3 677		
<i>Add</i> Net profit	5 438	7 187		
	12 271	10 864		
<i>Less</i> Drawings		4 031		
Total owner's equity	12 271	6 833		
Total liabilities and owner's equity	\$ 20 132	\$15 518		

★ 2.50 Earning capacity ratios

From the information below, calculate the gross profit ratio, net profit ratio and rate of return on equity.

Robinson Enterprises
Income statement for the year ended 30 June 2010

	\$	\$
Sales		
Cash	5 000	
Credit	3 595 000	
Less Sales returns	<u>(100 000)</u>	
Total net sales		3 500 000
Less Cost of goods sold		<u>2 705 000</u>
Gross profit		795 000
Add Other revenue		
Rent revenue		<u>50 000</u>
		845 000
Less Other expenses		
Advertising	293 000	
Delivery van expenses	35 000	
Telephone	40 000	
Wages	325 000	
Bad debts	<u>20 000</u>	713 000
Net profit		<u>\$132 000</u>

Additional information:

- Owner's equity as at 1 July 2009 was \$430 000. There were no drawings.

★★ 2.51 Earning capacity ratios

The following information was extracted from the records of Pengrin Co. Calculate the earning capacity ratios for 2009 and 2010.

Pengrin Co.
Income statement for the year ended 30 June

	2010	2009
	\$	\$
Sales		
Cash	6 500	8 500
Credit	2 598 000	2 241 000
Less Sales returns	<u>(40 000)</u>	<u>(25 000)</u>
Total net sales	2 564 500	2 224 500
Less Cost of goods sold	<u>1 356 900</u>	<u>1 450 980</u>
Gross profit	1 207 600	773 520
Add Other revenue		
Commission revenue	120 000	85 000
	<u>1 327 600</u>	<u>858 520</u>
Less Other expenses		
Advertising	145 000	98 000
Delivery expenses	21 000	26 000
Sales salaries	35 000	39 000
Office wages	18 000	19 500
Insurance	3 600	3 900
Telephone and power	2 900	3 200
Rates	3 500	3 400
Rent	<u>16 000</u>	<u>18 500</u>
Net profit	<u>\$1 082 600</u>	<u>\$647 020</u>

Additional information:

- Owner's equity as at 1 July 2008 was \$68 000.
- Drawings during 2009/2010 amounted to \$34 000.

★★ 2.52 Earning capacity ratios

From the information below, calculate the earning capacity ratios as at 30 June 2010 for R Kung. State clearly what the ratios indicate about the business.

	\$
Total assets (1/7/09)	980 900
Total assets (30/6/10)	890 900
Gross profit (30/6/10)	360 500
Net profit	120 600
Owner's equity (1/7/08)	428 260
Owner's equity (1/7/09)	500 870
Owner's equity (prior to drawings) (30/6/10)	621 470
Drawings (30/6/10)	400 000
Net sales	900 460

★★ 2.53 Gross and net profit ratios



Safilo Enterprises has a gross profit ratio of 45% and a net profit ratio of 20%. The industry average is 55% and 15%, respectively. Examine possible reasons for the differences between the industry average ratios and those for Safilo Enterprises.

★★ 2.54 Earning capacity ratios

Chadwick Enterprises has invited you to analyse its data to ascertain the profitability of the business. You have decided to assess the business mainly by using ratios. Calculate the earning capacity ratios for this enterprise for the two years and comment on your findings.

Chadwick Enterprises Income statement for the year ended 30 June

	2010	2009
	\$	\$
Sales		
Cash	120 000	96 000
Credit	1 756 900	1 589 000
Less Sales returns	(35 000)	(26 000)
Total net sales	1 841 900	1 659 000
Less Cost of goods sold	980 000	868 000
Gross profit	861 900	791 000
Add Other revenue		
Interest revenue	2 900	5 600
	864 800	796 600
Less Other expenses		
Cartage outwards	15 000	13 000
Vehicle expenses	3 500	4 200
Wages	29 000	36 000
Electricity	3 900	4 500
Audit fees	6 800	7 000
Stationery	28 900	25 600
Rent	24 000	19 000
Repairs and maintenance	13 250	2 900
Net profit	\$740 450	\$684 400

Chadwick Enterprises
Balance sheet as at 30 June

	2010 \$	2009 \$
Assets		
Bank	126 000	13 650
Accounts receivable	248 000	586 000
Inventories control	167 840	158 900
Motor vehicles	85 000	98 000
Buildings	569 000	298 000
Land	450 000	300 000
Furniture	22 000	24 000
Shares		200 000
Total assets	<u>\$1 867 840</u>	<u>\$1 478 550</u>
Liabilities		
Accounts payable	289 000	375 000
Accrued expenses	14 600	12 300
Mortgage		160 000
Total liabilities	<u>303 600</u>	<u>547 300</u>
Owner's equity		
Capital	931 250	291 350
Add Net profit	740 450	684 400
	1 671 700	975 750
Less Drawings	107 460	44 500
Total owner's equity	<u>1 564 240</u>	<u>931 250</u>
Total liabilities and owner's equity	<u>\$1 867 840</u>	<u>\$1 478 550</u>

★★ 2.55 **Earning capacity ratios**

Calculate the earning capacity ratios for exercise 2.38 on pages 191–2 and comment on the results. The industry averages are as follows:

- Gross profit margin 24.56%
- Net profit margin 17.44%
- Rate of return on equity 16.35%

★★ 2.56 **Earning capacity ratios**

Calculate the earning capacity ratios for exercise 2.39 on page 192 and comment on the results. The industry averages are as follows:

- Gross profit margin 33.46%
- Net profit margin 22.14%
- Rate of return on equity 12.25%

★★ 2.57 **Earning capacity ratios**

Calculate the earning capacity ratios for exercise 2.40 on pages 192–3 and comment on the results. The industry averages are as follows:

- Gross profit margin 38.50%
- Net profit margin 16.79%
- Rate of return on equity 15.67%

★★★ 2.58 **Decision-making 1**

Neil De Marco began Concept Computing Service on 1 July 2009. Neil has come to you as he wishes to know how much net profit his business earned during the last year. He would also like to know the financial position of his business.

Neil began operations by borrowing \$40 000 through the National Bank. He also contributed \$25 000 of his own funds to start the business. During the year, he purchased equipment to the value of \$28 000.

Service revenue for the year totalled \$95 600, of which \$3 200 was received in advance from customers. At 30 June 2010, \$2 100 was still owing to him by customers for services rendered. These revenues have not been recorded. An amount of \$5 000 was expended on

supplies for the year, of which \$1 200's worth has not yet been used. Neil pays \$1 000 per month rent and always pays one month in advance. He has one employee who has been paid \$23 000 but is still owed \$500 as at 30 June 2010. Other expenses included electricity \$1 200, telephone \$800 and interest expense \$3 000.

During the year, Neil withdrew \$30 000 for his own personal use. He is hoping to obtain an additional loan from the bank but must show the bank that his capital has grown at least \$10 000 from its original balance.

Prepare the financial reports to determine whether Neil will be able to meet the bank's requirements.

★★★ 2.59 Decision-making 2

Karen Anthony owns Body Beautiful, which sells an exclusive range of body products. The business has been operating for three years. Karen is deciding whether to open another business and has prepared the current financial reports of the business (shown below). She read in an industry journal that a successful products business meets all of these criteria:

- gross profit percentage is at least 50%
- net profit percentage is at least 20%
- rate of return on owner's equity is 19%.

Karen believes her business meets all three criteria. She plans to go ahead with the expansion plan and asks your advice on preparing the financial reports in accordance with appropriate accounting principles. When you point out that the reports are not properly prepared, she assures you that all amounts are the actual amounts received and paid out – she even has the receipts and cheque butts to show you.

After further discussion with Karen, you determine that there are still outstanding expenses and revenues at 30 June 2010 that have not yet been recorded. These are \$3 900 for wages; \$3 300 for interest expense; and commission revenue of \$500. In addition, it was discovered that the insurance paid was for a 12-month period from 1 October 2009.

Body Beautiful
Income statement for the year ended 30 June 2010

	\$	\$	\$
Revenue			
Sales revenue	240 000		
Less Sales returns	<u>11 000</u>	229 000	
GST clearing		<u>1 400</u>	230 400
Less Cost of goods sold		108 000	
Delivery to customers		<u>3 000</u>	111 000
Gross profit			119 400
Less Expenses			
Wages		25 000	
Insurance		1 200	
Interest		3 000	
Electricity		2 400	
Telephone		<u>800</u>	32 400
Net profit			<u><u>\$87 000</u></u>

Assume the GST figure represents the amount owed to the ATO.

Body Beautiful
Balance sheet as at 30 June 2010

	\$	\$
Assets		
Bank	9 400	
Accounts receivable	14 000	
Inventories	23 000	
Delivery vehicle	47 000	
Drawings	55 000	148 400
Less Liabilities		
Accounts payable	16 000	
Loan from bank	20 000	36 000
Net assets		\$112 400
Represented by:		
Owner's equity		
Capital	25 400	
Add Net profit	87 000	\$112 400

You are required to do the following:

- a** Calculate the three ratios based on the financial reports prepared by Karen Anthony.
Does the business appear to be ready for expansion?
- b** Prepare a correct income statement and balance sheet.
- c** Calculate the three ratios based on the corrected financial reports.
- d** Make a recommendation about whether Karen should undertake the expansion.



Area of study:

Recording and controls

RC1 Accounting for cash

RC2 Subsidiary ledgers

RC3 Inventories

RC4 Non-current assets

RC5 Controls

RC6 E-business

Chapter

3

RC1

Accounting for cash

Specialised cash journals

- Purpose of cash journals
- Cash receipts journal
- Cash payments journal
- Cost of goods sold
- General versus specialist journals

Bank reconciliations

- Bank's records versus the business's records
- Reconciliation process
- Reconciliation process – previous bank reconciliation
- Complex bank reconciliations
- Computer applications

Part 1 – Specialised cash journals

Already know

- How to account for cash transactions through the general journal and post the general ledger

Need to know

- How to record transactions in columnar cash journals
- How to post the columnar cash journals to the ledger and prepare a trial balance

Using this knowledge

- *Provides information for decision-making* by categorising like items into specialised journals
- *Assists in discharging accountability* through providing the opportunity for different personnel to take responsibility for each specialised journal (division of duties)

ACCOUNTING VOCABULARY

Cash payments journal

Cash receipts journal

Learning objectives

After completing this section, you should be able to:

- 1 understand the purpose of cash journals
- 2 complete a cash receipts journal and post to the ledger
- 3 complete a cash payments journal and post to the ledger
- 4 record cost of goods sold
- 5 understand the similarities and differences between the general and specialist journals.

Purpose of cash journals

Learning objective 1

When recording all transactions in the general journal, many repetitive entries are required – particularly those relating to the bank account. This method of recording cash transactions causes the general ledger accounts to become unmanageable. To eliminate the repetitive cash entries in the general journal and general ledger, two cash journals are introduced:

- cash receipts journal – records all cash received
- cash payments journal – records all cash paid.

These two specialised journals classify like items (cash) together and allow for a summary of the cash transactions only to be posted to the general ledger.

Cash receipts journal

Learning objective 2 The **cash receipts journal** summarises all receipts of cash. Cash can be received in the form of:

- money (notes and coins)
- cheques
- money orders
- direct deposits
- EFTPOS transfers.



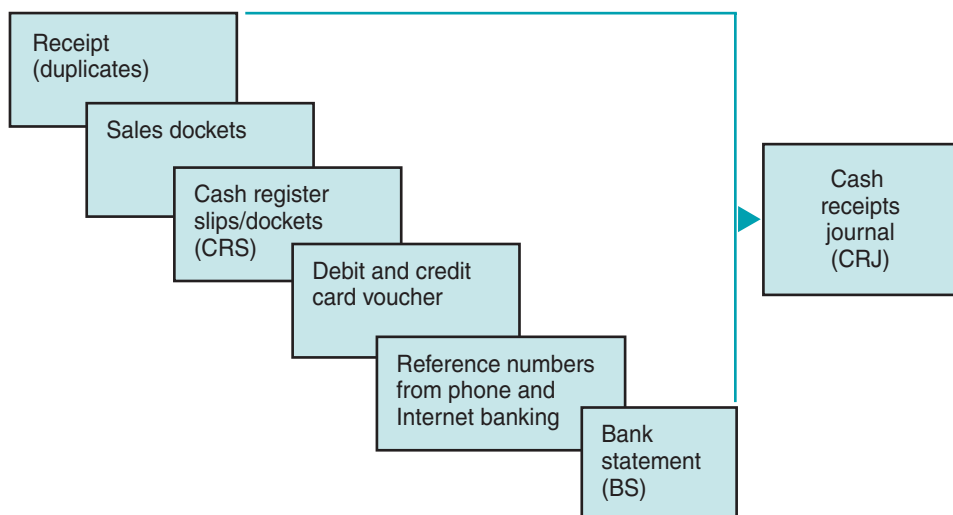
A **cash receipts journal** records the receipt of cash (in any form) by the business. It classifies like items together and acts as an aid for posting to the ledger by analysing cash receipt transactions into their debit and credit components.



Source documents

The *source documents* that are the basis for entry into the *cash receipts journal* are shown in [3.1].

[3.1]



Businesses vary in type and structure, so their particular requirements differ considerably. The source documents and their analytical requirements also vary widely. Each business customises its cash receipts journal to meet its specific requirements. For consistency, the cash receipts journals throughout this text will be presented in the format shown in example 1.

EXAMPLE 1

From the following transactions, complete the cash receipts journal for Buy-mart of Warwick. These transactions relate to the month of July 2009. Start numbering receipts from 230.

2009

- July 1 The owner contributed an additional \$10 000 cash to the business. GST is not applicable
Sold goods for cash for \$460 net, GST \$46
Received rent from business tenant \$200 plus \$20 GST, receipt no. 231
5 Sold goods for cash for \$165 gross, GST \$15
10 Commission received \$66 including GST, receipt no. 232
R Louis paid her account of \$190, receipt no. 233
15 EFTPOS sales, \$300 plus \$30 GST
Items returned by Buy-mart for \$363 gross, GST \$33. These items were previously purchased for cash and therefore the refund was in cash
31 The bank statement received indicated that \$100 plus \$10 GST was received for services rendered from A Garnet

'Gross' includes GST, whereas 'net' excludes GST.

Buy-mart, Warwick
Cash receipts journal

All returns of purchases are reclaimed at cost price. These returned inventories are subtracted from the business's inventory records.

The cost of goods sold entry is still completed in the general journal.

Check that the total of the credit columns equals the total of the debit column (bank).

Date 2009	Rec no./ref	Particulars	Post ref	Sales Cr \$	Service revenue Cr \$	Other Cr \$	Accounts receivable Cr \$	GST clearing Cr \$	Bank Dr \$
Jul	1 230	Capital				10 000			
	CRS	Sales		460				46	
	231	Rent revenue				200		20	10 726
	5 CRS	Sales		150				15	165
	10 232	Commission revenue				60		6	
	233	R Louis					190		256
	15 CRS	Sales EFTPOS		300				30	330
	CRS	Inventories (returns)				330		33	363
	31 BS	Service revenue			100			10	110
				910	100	10 590	190	160	11 950

When more than one transaction occurs on any one day, the total of the cash banked is entered in this column (excluding EFTPOS sales).

✓ Helpful hints

- The bank statement may reveal additional receipts.
- All entries in the cash receipts journal include:
 - Dr to bank account
 - Cr to some other account/s.

Issues to note in the cash receipts journal:

- All transactions are entered in date order.
- The receipt number is obtained from the duplicate receipt, which is retained by the business and filed in chronological and consecutive order. The cash register summary (CRS) total is entered in the appropriate date order. Some businesses will have more than one cash register summary because they may have separate summaries for each cash register.

EFTPOS sales are entered into the bank column separately because the bank settles EFTPOS entries at the end of each working day. These entries are a separate line item in the bank statement.

- The 'Particulars' column identifies the account – other than the bank account – affected by the transaction.
- The 'Other' column identifies all receipts that do not have a separate column allocated to them. This column is divided into additional columns by some businesses when required.
- The amount received is entered in the 'Accounts receivable' column and the 'Bank' column to reflect the amount banked. GST is not applied here, as it would be recorded at the time of sale.
- When applicable, goods and services tax is entered.
- The 'Bank' column reflects the total amount banked each day. When more than one transaction occurs on any one day, the total of the cash banked is entered in this column. This procedure assists when completing the bank reconciliation process, which is discussed later in this chapter.
- EFTPOS sales are shown separately from other cash sales. They are not added to any other entry for that day but are entered directly into the 'Bank' column. This procedure also assists the completion of the bank reconciliation process.
- At month end, each column is totalled (after the bank reconciliation process has been completed).
- The letters 'BS' in the receipt number reference column refer to information obtained from the bank statement.

Review & practice

1

Refer to example 1 and answer the following questions.

- Who** received the \$330 on 15 July?
- What** is the total amount banked on 10 July?
- Where** are the accounts receivable receipts entered in this journal?
- Why** is the \$220 received on 1 July not entered directly into the bank column?
- How** much cash was received from sources other than sales and accounts receivable for the period?
- f** Enter the following transactions into the cash receipts journal of T Loi, who owns and operates an electrical store. Total the journal at the end of the month.

2009

- | | |
|--------|---|
| Sept 1 | Cash sales (including 10% GST) \$440 |
| 3 | Received rent for flat above the shop \$200 (receipt no. 24) GST-free |
| 6 | Cash sales \$900 net – 10% GST applies |
| 7 | J Adams (an accounts receivable) paid T Loi \$200, receipt no. 25 |
| 13 | Received \$242 commission from Sony Televisions, receipt no. 26, including 10% GST |
| 14 | Cash sales (including 10% GST) \$550 |
| 17 | S Doogan paid T Loi \$340, receipt no. 27 |
| 18 | EFTPOS sales amounted to \$253 (GST of \$23 is included)
P Dimonds owed T Loi \$90. Received payment for this amount, receipt no. 28 |
| 23 | Cash sales \$134 net, plus \$13.40 GST |

Residential rents are GST-free.
Commercial rents attract GST.

Posting to the general ledger

Posting to the general ledger from the cash receipts journal can be completed on a monthly basis. To assist with the posting procedure, the corresponding general ledger account numbers from the chart of accounts are written below each journal column total. Figure [3.2] illustrates how the posting is achieved.

[3.2]

Cost of goods sold would be obtained from the inventory records and this account would form part of the general ledger. This is dealt with on pages 272–3.

Buy-mart, Warwick Cash receipts journal										
Date 2009	Rec no./ref	Particulars	Post ref	Sales \$ Cr	Service revenue \$ Cr	Other \$ Cr	Accounts receivable \$ Cr	GST clearing \$ Cr	Bank \$ Dr	
Jul	1 230	Capital	5101			10 000				
	CRS	Sales		460				46		
	231	Rent revenue	1106			200		20	10 726	
	5 CRS	Sales		150				15	165	
	10 232	Commission revenue	1103			60		6		
	233	Accounts receivable — R Louis	3104.1				190		256	
	15 CRS	Sales EFTPOS		300				30	330	
	CRS	Inventories (returns)	3105			330		33	363	
	31 BS	Service revenue			100			10	110	
				910	100	10 590	190	160	11 950	
				(1101)	(1102)	(X)	(X)	(4102)	(3103)	

Buy-mart General ledger (extract) – T-format					
Dr					Cr
Date	Part.	Amount \$	Date	Part.	Amount \$
2009			2009		
1101	Sales a/c				
			Jul 31	Bank	910
1102	Service revenue a/c				
			Jul 31	Bank	100
1103	Commission revenue a/c				
			Jul 10	Bank	60
1106	Rent revenue a/c				
			Jul 1	Bank	200
3103	Bank a/c				
Jul 31	Receipts	11 950			
3104.1	Accounts receivable – R Louis				
			Jul 10	Bank	190
3105	Inventories a/c				
			Jul 15	Bank (returns)	330
4102	GST clearing a/c				
			Jul 10	Bank	160
5101	Capital a/c				
			Jul 1	Bank	10 000

Buy-mart General ledger (extract) – Columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
1101	Sales a/c			
Jul 31	Bank		910	910 Cr
1102	Service revenue a/c			
Jul 31	Bank		100	100 Cr
1103	Commission revenue a/c			
Jul 10	Bank		60	60 Cr
1106	Rent revenue a/c			
Jul 1	Bank		200	200 Cr
3103	Bank a/c			
Jul 31	Receipts	11 950		11 950 Dr
3104.1	Accounts receivable – R Louis			
Jul 10	Bank		190	190 Cr
3105	Inventories a/c			
Jul 15	Bank (returns)		330	330 Cr
4102	GST clearing a/c			
Jul 31	Bank		160	160 Cr
5101	Capital a/c			
Jul 1	Bank		10 000	10 000 Cr

Note the following about [3.2]:

- The total of each column is posted to the relevant account in the ledger except for the 'Other' and the 'Accounts receivable' columns. The letter 'X' indicates that this column is not posted as a total. Instead, each entry in this column is posted individually to the appropriate general ledger account. The 'Post ref' column is used for entries in the 'Other' column.
- 'Receipts' is the word written in the reference column in the ledger account for the bank account because there are a variety of accounts involved.

✓ Helpful hints

Although totals from the journal were posted to the general ledger, the double-entry system is maintained.

Debits = Credits

A trial balance can be extracted from the ledger in [3.2]. A working balance is calculated for each of the accounts before preparing the trial balance.

► Exercises 3.3 to 3.7, pages 235–6

Cash payments journal

Learning objective 3

By using a **cash payments journal**, like transactions can be identified and totalled. These totals then form the basis of the entries into the general ledger. This journal summarises all payments of cash for accounting purposes. Cash can be paid by:

- money (notes and coins)
- cheque
- money order
- direct payment (automatic)
- EFTPOS transfer.

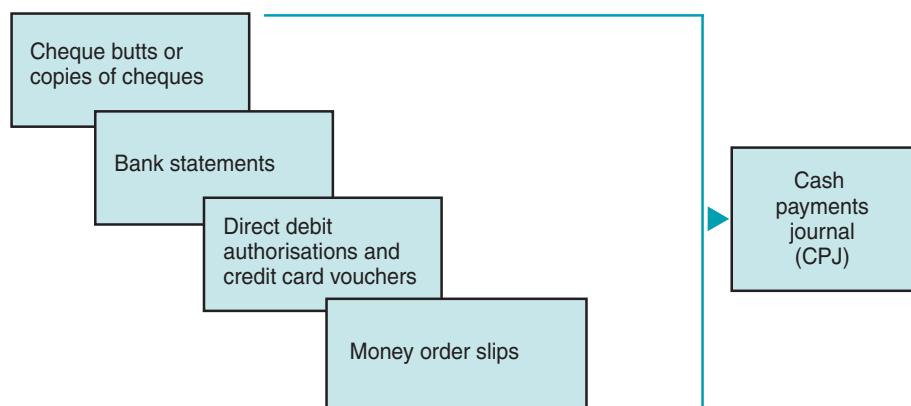


A **cash payments journal** records all payments made by a business. It classifies like items together in the cash payments journal and acts as an aid for posting to the ledger by analysing the transactions into their debit and credit components.

Source documents

The *source documents* that are the basis for entry into the *cash payments journal* are shown in [3.3].

[3.3]



As with the cash receipts journal, businesses vary in type and structure, and therefore in their analytical requirements as well. Each business customises its cash journals to reflect its specific requirements. For consistency, the cash payments journal throughout this text will be presented in the format shown in example 2.

EXAMPLE 2

Buy-mart of Warwick had the following transactions for the month of July 2009.

2009

- July 1 Goods sold for cash were returned and a cash cheque, number 367, was written to the value of \$110 gross, GST \$10
Paid wages \$10 500, cheque number 368
- 5 Purchased inventories for cash \$1 500 net plus GST \$150 on cheque number 369; and supplies worth \$650 plus \$65 GST on the same cheque
- 10 Paid sales commission of \$616 with cheque number 370, including GST
Paid S Cowan's account for \$2 400, cheque number 371
- 15 Paid S Mann's account for \$1 200, cheque number 372
Purchased goods for cash \$500 (GST-free), cheque number 373
- 31 The bank statement received showed that \$5 had been deducted from our bank account for a new cheque book.

Buy-mart, Warwick Cash payments journal

Date	Chq no./ref	Particulars	Post ref	Inventories	Supplies Expense	Wages	Other	Accounts payable	GST clearing	Bank
				Dr \$	Dr \$	Dr \$	Dr \$	Dr \$	Dr \$	Cr \$
2009										
Jul	1 367	Sales returns					100		10	110
	368	Wages				10 500				10 500
	5 369	Inventories		1 500					150	
		Supplies expense			650				65	2 365
	10 370	Sales commission					560		56	616
	371	Accounts payable – S Cowan						2 400		2 400
	15 372	Accounts payable – S Mann						1 200		1 200
	373	Inventories		500						500
	31 BS	Bank charges					5			5
				2 000	650	10 500	665	3 600	281	17 696

✓ Helpful hints

- The bank statement may reveal additional payments.
- All entries in the cash payments journal include:
 - Dr to some other account/s
 - Cr to bank account.

Issues to note in the cash payments journal:

- The cheque number is obtained from the duplicate cheque or cheque butt. Cheques are issued in chronological and consecutive order.

- The 'Particulars' column identifies the account (other than the bank account) affected by the transaction.
- Only cash transactions of goods and services purchased are entered in the inventories column.
- The 'Other' column identifies all payments that do not have a separate allocated column.
- The total paid is entered in the 'Accounts payable' column and the 'Bank' column to reflect the amount actually paid by the enterprise when the cheque is presented to the bank.
- When applicable, goods and services tax is recorded. When paying an accounts payable account, GST is not recorded because it was accounted for at the time the items were purchased.
- The 'Bank' column represents the total amount paid when the cheque is presented to the bank for payment.
- The sales returns in the 'Particulars' column represent the return of inventories by the customers of goods sold for cash. The amount refunded to the customer is the original sales value plus GST. The cost price component of this transaction would be recorded in the general journal.
- At month end, each column is totalled and posted to the general ledger.
- The letters 'BS' refer to information obtained from the bank statement.

Review & practice 2

Refer to example 2 and answer the following questions.

- Who** received the \$1 200 paid on 15 July 2009?
- What** is the total value of cash purchases of goods and services for the month?
- When** is the bank column totalled?
- Where** has the information needed to complete the cash payments journal come from?
- Why** is the transaction that took place on 1 July 2009 entered into the 'Other' column instead of the 'Inventories' column?
- How** much was S Cowan paid on 10 July 2009?
- Enter the following transactions into the cash payments journal of B McPhee, who owns a photographic supplies store.
Total the journal at the end of the month.

2009

- | | |
|--------|---|
| June 3 | Bought five cameras and tripods for \$1 210 with cheque no. 664, including GST |
| 5 | Paid wages for \$4 000 with cheque no. 665 |
| 9 | Cash purchases of extra strong lens (ref 4512) for \$231, including GST (10%), cheque no. 666 |
| 15 | Bev McPhee withdrew \$160 cash for her own use, cheque no. 667 |
| 17 | Paid Photographic Supplies Ltd \$2 600 with cheque no. 668 |
| 21 | Paid for advertising in the newspaper with cheque no. 669 (\$825, including GST) |
| 27 | Paid \$1 320 (including GST) to ANZ newsagency for stationery with cheque no. 670 as well as \$330 (including GST) on the same cheque for a magazine subscription |

Posting to the general ledger

Posting to the general ledger from the cash payments journal can be completed on a monthly basis. To assist with the posting procedure, the ledger account numbers from the chart of accounts are written below the column totals. Figure [3.4] illustrates how the posting is achieved.

[3.4]

Buy-mart Cash payments journal										
Date	Chq no./ref	Particulars	Post ref	Inventories \$ Dr	Supplies expense \$ Dr	Wages \$ Dr	Other \$ Dr	Accounts payable \$ Dr	GST clearing \$ Dr	Bank \$ Cr
2009										
Jul	1 367	Sales returns	1101A				100		10	110
	368	Wages				10 500				10 500
	5 369	Inventories		1 500					150	
		Supplies expense			650				65	2 365
	10 370	Sales commission	2306				560		56	616
	371	Accounts payable – S Cowan	4101.1					2 400		2 400
	15 372	Accounts payable – S Mann	4101.2					1 200		1 200
	373	Inventories		500						500
	31 BS	Bank charges	2502				5			5
				2 000	650	10 500	665	3 600	281	17 696
				(3105)	(2201)	(2305)	(X)	(X)	(4102)	(3103)

Buy-mart General ledger (extract) – T-format						Buy-mart General ledger (extract) – columnar format				
Dr	Date	Part.	Amount \$	Cr	Date	Part.	Amount \$	Date	Particulars	Debit \$
	2009				2009					
		1101A Sales returns a/c				1101A Sales returns a/c				
	Jul 31	Bank	100			Jul 1 Bank	100			100 Dr
		2201 Supplies expense a/c				2201 Supplies expense a/c				
	Jul 31	Bank	650			Jul 31 Bank	650			650 Dr
		2305 Wages a/c				2305 Wages a/c				
	Jul 31	Bank	10 500			Jul 31 Bank	10 500			10 500 Dr
		2306 Sales commission a/c				2306 Sales commission a/c				
	Jul 10	Bank	560			Jul 10 Bank	560			560 Dr
		2502 Bank charges a/c				2502 Bank charges a/c				
	Jul 31	Bank	5			Jul 31 Bank	5			5 Dr
		3103 Bank a/c				3103 Bank a/c				
				Jul 31 Payments	17 696		Jul 31 Payments		17 696	17 696 Cr
		3105 Inventories a/c				3105 Inventories a/c				
	Jul 31	Bank	2 000			Jul 31 Bank	2 000			2 000 Dr
		4101.1 Accounts payable – S Cowan				4101.1 Accounts payable – S Cowan				
	Jul 10	Bank	2 400			Jul 10 Bank	2 400			2 400 Dr
		4101.2 Accounts payable – S Mann				4101.2 Accounts payable – S Mann				
	Jul 15	Bank	1 200			Jul 15 Bank	1 200			1 200 Dr
		4102 GST clearing a/c				4102 GST clearing a/c				
	Jul 31	Bank	281			Jul 31 Bank	281			281 Dr

The method of posting will vary slightly after subsidiary ledgers are introduced in chapter 4.

Note the following about [3.4].

- The total of each of the columns is posted to the relevant account in the ledger except for the 'Other' and the 'Accounts payable' columns at this stage. The 'X' indicates that this column is not posted as a total. Instead, each item is posted individually from these columns to the general ledger.
- 'Payments' is the reference for the bank account because the total cash figure has been paid from a variety of sources.

✓ Helpful hints

Although totals were posted to the ledger, the double-entry system is maintained.

A trial balance can be prepared from the ledger in [3.4].

Buy-mart, Warwick
Trial balance (extract) as at 31 July 2009

Account no.	Account name	Debit \$	Credit \$
1101A	Sales returns	100	
2201	Supplies expense	650	
2305	Wages expense	10 500	
2306	Sales commission	560	
2502	Bank charges	5	
3103	Bank		17 696
3105	Inventories	2 000	
4101.1	Accounts payable – S Cowan	2 400	
4101.2	Accounts payable – S Mann	1 200	
4102	GST clearing	281	
		<u>\$17 696</u>	<u>\$17 696</u>

► Exercises 3.10 to 3.18, pages 237–40

Cost of goods sold

Learning objective 4

Accounting for inventory is discussed in chapter 5.

Alternatively, some businesses choose to add a further 'Cost of goods sold' column to the cash receipts journal.

To this point, goods sold have been recorded at sales price only. When goods are sold, two values must be recorded: the purchase (cost) price of the goods sold, and the selling price of the goods sold. When entries are made in the sales column of the cash receipts journal at sales price, a further entry is required in the general journal for the cost of the goods sold. The cost of these goods to the business is calculated from the inventory records. A general journal entry is required to record this cost and is the same as the entry completed in chapter 1.

If the purchase price (cost price) of goods sold is \$6 100 and the selling price is \$10 000, the entry would be as shown in example 3.

EXAMPLE 3

Selling price

The selling price is recorded in the cash receipts journal.

Cash receipts journal (extract)

	Sales	GST clearing	Bank
Sales	10 000	1 000	11 000

Cost price

The cost price is recorded in the general journal as shown below. This entry transfers the cost of goods sold from the asset account, inventories, to the expenses account, cost of goods sold.



General journal (extract)

Cost of goods sold	Dr	6 100	
Inventories	Cr		6 100
(Cost of goods sold, ref no.)			

✓ Helpful hints

- Record the selling price of inventories sold for cash in the cash receipts journal.
- Record the cost price of inventories sold in the general journal.



General versus specialist journals

Learning objective 5 It is apparent that the general journal and the cash journals are both useful instruments for recording transactions. There are differences between these two books of original entry, and each book can be utilised by businesses with varying requirements. Table [3.5] shows some of the similarities and differences between the use of the general journal and the specialised cash journals.

[3.5]

	General journal	Cash journals
Similarities	<ul style="list-style-type: none"> • Analyses transactions into Dr and Cr components (double-entry system) 	<ul style="list-style-type: none"> • Analyse transactions into Dr and Cr components (double-entry system)
Differences	<ul style="list-style-type: none"> • Can only post <i>individual</i> transactions to the ledger • <i>Identifies and records each entry</i> without totals or any classification of transactions • May include <i>all transactions</i> 	<ul style="list-style-type: none"> • Posts the <i>summarised totals</i> of most transactions to the ledger • <i>Identifies, classifies and totals:</i> <ul style="list-style-type: none"> – Sales of inventories – Purchases of inventories – Accounts receivable receipts – Accounts payable payments – Cash received and paid for other items • <i>Only includes cash transactions</i>

Review & practice 3

C a s e s t u d y

Blu Tube Discounts

Blu Tube Discounts is undertaking an advertising campaign to attract additional retail owners into this franchise group. It has advertised that only limited accounting knowledge of procedures is required by prospective owners.

Blu Tube Discounts suggested that general journal knowledge was sufficient for all cash records needed. A recent new owner questioned such an assertion. He claimed that it took him hours to post these transactions into the general ledger. Blu Tube Discounts, however, claimed that the majority of transactions occur on a cash basis and therefore the ability to trace transactions is easier using only the general journal. In the long run, therefore, it was cost effective.

- a Where** could the current and potential franchisees of Blu Tube Discounts find additional opinions/information on this issue?
- b When** would you recommend a general journal approach be taken to record all transactions?
- c Why** would you recommend a specialised journal approach?
- d** Write a letter from the franchiser to the franchisees, both current and potential, addressing the issues raised in the case study. Make sure you demonstrate your understanding of:
 - i** the use of the general journal
 - ii** the use of specialised cash journals
 - iii** similarities and differences between the general journal and specialised journals
 - iv** what makes these journals special.

► Exercises 3.19 and 3.20, page 240

Part 2 – Bank reconciliations

Already know

- How to account for transactions from the business's bank statement

Need to know

- How to complete the bank reconciliation process, incorporating:
 - dishonoured cheques
 - errors
 - outstanding items from previous reconciliation statements
 - both debit and credit bank balances

Using this knowledge

- *Provides information for decision-making* by providing verification of the cash balance of the business
- *Assists in discharging accountability* through providing a check from an independent source (the bank statement) on the accuracy of the business's records (the bank account in the general ledger)

ACCOUNTING VOCABULARY

Bank reconciliation

Bank reconciliation statement

Bank statement

Deposits not yet credited

Dishonoured cheques

Honoured cheques

Night safe deposits

Unpresented cheques

Learning objectives

After completing this section, you should be able to:

- 1 compare the business's bank account records in the general ledger with the records held by the bank
- 2 reconcile differences between these two sets of records
- 3 complete a bank reconciliation with a bank overdraft, dishonoured and returned cheques, and errors
- 4 complete a bank reconciliation using an accounting package application.

Bank's records versus the business's records

Learning objective 1

The bank provides every business with **bank statements** on a regular basis. The balances of these statements can be compared with the bank account balances in the business's general ledger. These two independent records rarely agree, although both may be correct. One reason for the differences is the time lag involved in recording some transactions. For example, in the business's accounts, payments made by cheque are recorded in the cash payments journal at the time the cheques are written. The bank does not record the business's cheque values against the business's bank account until the cheques are presented to the bank for payment. Consequently, these two independent records need to be reconciled and any differences resolved.



A **bank statement** shows the bank's record of the cash held by a business with the bank. It lists the deposits, withdrawals and balance of the business's bank account over a stated time period.

See also chapter 9, example 4, page 480.

The business must explain all differences between its own cash records (bank account) and the bank statement as at a particular date. This explanation of the differences is called a **bank reconciliation statement**. This statement is prepared by the business, not the bank. The preparation of the bank reconciliation statement is a procedure that assists in ensuring the accuracy of the business's financial records.



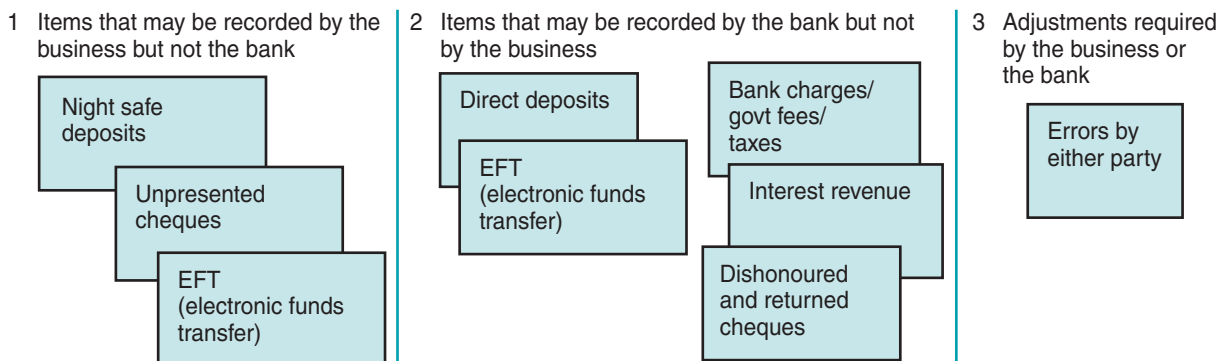
A **bank reconciliation statement** brings into agreement the balance of the business's bank account with the bank's records of the business's account after all outstanding transactions have been taken into consideration.

Refer to page 385 for the control benefits of the bank reconciliation process.

The bank reconciliation is one facet of control over the asset, cash. For most small businesses, this procedure is carried out at the end of the month when the bank statements are received in the post. However, with Internet banking now readily available, businesses can download their bank statements whenever they wish. Very large businesses complete their bank reconciliation statements daily. It is imperative that the business's records agree with the bank's records, and that any discrepancies are detected and the appropriate adjustments made. This process is usually completed electronically within a computerised accounting package. However, the manual completion of a bank reconciliation allows for a comprehensive understanding of this procedure.

Some common items that cause a difference between the business's record of its bank account balance in the general ledger and the bank's record of the business's bank account balance are shown in [3.6] and explained in [3.7] on page 217.

[3.6]



If the business has funds in the bank, the business's account will be recorded as a credit balance in the bank's records. The business's account is a liability to the bank because the bank owes these funds to the business. However, money in the bank is an asset to the business and therefore has a debit balance in the business's records. This concept is shown graphically in [3.8] on page 217.

The business records and the bank records treat the same values and transactions as opposites. The bank balance is treated as:

- *an asset* in the records of the business
- *a liability* in the records of the bank.

Therefore:

- business debits = bank credits
- business credits = bank debits

[3.7]

1 Items recorded by the <i>business</i> but not the bank	
<i>Night safe deposits</i>	Deposits may be recorded in the cash receipts journal but not in the bank statement until the next day. The use of a night safe deposit box means that the bank will not record these deposits until the following day.
<i>Unpresented cheques</i>	Cheques may have been drawn on the business's account but not yet been presented at the bank for payment. The bank statement shows only those cheques it has honoured (i.e. paid).
<i>EFT items</i>	Electronic funds transfers may be received or paid electronically by the business but not settled until after midnight.
2 Items recorded by the <i>bank</i> but not the business	
<i>Direct deposits</i>	The business can authorise the bank to accept deposits on its behalf. Only when the bank statement is issued does the business receive confirmation of the increase in its deposits. Rent revenue is commonly deposited directly into the business's bank account.
<i>Bank charges</i>	When the bank has transactions with the business, various bank fees can apply. These include fees for account keeping, merchant services (Bankcard/MasterCard transactions) and fees for the use of EFTPOS facilities.
<i>EFT items</i>	Electronic funds transfers may be received or paid electronically by the bank on behalf of the business. These payments appear on the bank statement. They would include BPay.
<i>Interest revenue</i>	Bank interest earned on the business's investments can be directly deposited by the bank into the business's account. This revenue appears on the bank statement.
<i>Dishonoured and returned cheques</i>	Cheques that have been deposited into the business's bank account and recorded as deposits (although not cleared) may be returned for a variety of reasons. The most common reason is insufficient funds in the drawer's account to cover the amount of the cheque.
3 Adjustments required by the business or the bank	
<i>Business errors</i>	Businesses do make errors. For example, the business may record a deposit as \$2 143 instead of \$2 134. Therefore, the business must make an adjustment in its records.
<i>Bank errors</i>	Bank errors also occur. The bank may overcharge on fees or enter amounts into incorrect accounts. Following confirmation from the bank, the required adjustment is recorded in the bank reconciliation statement by the business.

A cheque is honoured when the bank pays the claim on the funds from the business's account. A cheque is dishonoured or returned when the bank will not pay the claim on the business's funds.

[3.8]

As a credit balance indicates money in the bank, the bank will state when money is going into an account by crediting the account. When money is taken out of an account, the bank will indicate this by 'debiting' the account.

Business records

T-format		Columnar format		
Bank a/c		Bank a/c		
Deposit	Dr	Withdrawal	Cr	
		Deposit	Dr	Cr
		Withdrawal		Cr

Bank records

	Dr	Cr	Bal
Deposit		Cr	
Withdrawal	Dr		

Reconciliation process

Learning objective 2 To reconcile the bank and the business records, the transactions listed in the bank statement must be compared with the business's records to see which items agree and which do not. To reconcile these two sets of records, follow the steps listed below and illustrated in [3.9] on page 219.

Step 1



Match items that agree

Always ensure cheque numbers in the cash payments journal and the bank statement agree prior to ticking the items.

- a** Tick all items that agree in the cash receipts journal of the business with the credit column of the bank statement (e.g. deposits).
- b** Tick all items that agree in the cash payments journal with the debit column of the bank statement (e.g. presented cheques).

Step 2



Account for items that do not agree

Not applicable at this stage →

Where the adjustments are completed for errors:

- Own error, own books
- Bank error, bank reconciliation.

- a** Circle all items that are not ticked in the cash journals and bank statement.
- b** Add the circled items from the credit column of the bank statement to the cash receipts journal.
- c** Add the circled items from the debit column of the bank statement to the cash payments journal.
- d** Correct errors
 - i** If it is a bank error, adjust the bank reconciliation statement (either add or subtract the value, depending on the type of error).
 - or**
 - ii** If it is the business's error, enter the required adjustment in the cash journal that contains the error.

Step 3



Prepare the bank reconciliation statement

- a** Start with the *final* bank statement balance for the stated period.
- b** *Record* all circled items from the cash receipts journal.
- c** *Record* all circled items from the cash payments journal.

Step 4



Complete the process

- a** Total both journals and post to the bank account in the general ledger. (Balance a T-format ledger account.)
- b** Calculate the balance of the bank reconciliation statement.
- c** Check that the balance from step 4a equals the final total of step 4b.

On the completion of these steps, a bank reconciliation statement would be produced in the following format.

Bank reconciliation statement as at 30 June 20XX			
Credit balance as per bank statement			XXX
Add Deposits not yet credited			XXX
			XXX
Less Unpresented cheque no.		XXX	
		XXX	XXX
Debit balance as per bank account			XXX

Statement of account with The Trust Bank Brisbane Qld 4000				
Price Attack		Account number 4005 0034 1301		
Date	Transactions	Debit	Credit	Balance
2009				
June 1	Opening balance			2 986.00 Cr
	Credit interest (Auth#9682)		30.15	3 016.15 Cr
	State govt debit tax	3.05		3 013.10 Cr
	Account service fee	6.00		3 007.10 Cr
3	Deposit		1 206.00✓	4 213.10 Cr
5	Deposit		1 000.00✓	5 213.10 Cr
	0451			5 213.10 Cr
8	Deposit	2 200.00✓	5 215.00✓	3 013.10 Cr
	0452			8 228.10 Cr
10	0453	3 250.00✓		4 978.10 Cr
	0454	5 900.00✓		921.90 Dr
11	Deposit	1 400.00✓	5 800.00✓	2 321.90 Dr
14	0455			3 478.10 Cr
17	Deposit	1 750.00✓	1 550.00✓	1 728.10 Cr
18	TBB personalised cheque book			3 278.10 Cr
	0456	3.00	3 275.10 Cr	3 275.10 Cr
		400.00✓		2 875.10 Cr
26	Deposit		2 700.00✓	5 575.10 Cr
	0457			4 175.10 Cr
27	Deposit	1 400.00✓	6 000.00✓	10 175.10 Cr
	Current balance			10 175.10 Cr
Date of issue	Page No.	Total debits	Total credits	
30/06/09	61	\$16 312.05	\$23 501.15	

Credit balance as per bank statement
Add Deposits not yet credited

Less Unpresented cheque no. 0450 340.00

Debit balance as per bank a/c

10 175.10
950.00

11 123.10	The balance
660.00	account in

510 465.10

the bank reconciliation statement.

Correct business errors in these journals. Add to these journals what the bank knew but the business did not.			
Price Attack			
Cash receipts journal (extract)			
Date	Rec no.	Particulars	Bank Dr
2009 Jun 3	CRS	Sales	1 206.00✓
5	134	C Irving	1 000.00✓
8	CRS	Sales	5 215.00✓
11	135	V Lake	5 800.00✓
17	136	Rent revenue	1 550.00✓
26	137	H Luu	2 700.00✓
27	CRS	Sales	6 000.00✓
29	CRS	Commission revenue	950.00
30	BS	Interest revenue	30.15
			\$24 451.15
			(3103)

Price Attack			
Cash payments journal (extract)			
Date	Chq no.	Particulars	Bank Cr
2009 Jun 1	0450	Inventories	340.00
4	0451	Inventories	2 200.00✓
7	0452	N Marshall	3 250.00✓
8	0453	Office equipment	5 900.00✓
10	0454	Wages	1 400.00✓
14	0455	Inventories	1 750.00✓
17	0456	L McVea	400.00✓
26	0457	Wages	1 400.00✓
29	0458	Electricity	320.00
30	BS	Bank charges (state govt debit tax)	3.05
	BS	Bank charges (account service fee)	6.00
	BS	Bank charges (cheque book)	3.00
			\$16 972.05
			(3103)

Price Attack
General ledger (extract)

2009	2009
3103	Bank a/c

Jun 1	Balance b/d	2 986.00	Jun 30	Payments	16 972.05
30	Receipts	24 451.15		Balance c/d	10 465.10
		<u>27 437.15</u>			<u>27 437.15</u>

Price Attack

General ledger (extract)

Date	Particulars	Dr	Cr	Balance
2009				
	3103 Bank a/c			
Jun 1	Balance			2 986.00 Dr
30	Receipts	24 451.15		27 097.00 Dr
	Payments		16 972.05	10 465.10 Dr

Review & practice 4

Use the following bank statement of NV Supplies to answer these questions.

- What** would be a valid explanation for the entry dated 15 March 2009?
- What** is the balance of NV Supplies' bank account as at 20 March 2009?
- What** are five factors that could cause a difference between the business's cash records and the bank's records of a business account?
- Who** prepares the bank reconciliation statement – the business or the bank? Explain your answer.
- Why** are bank reconciliation statements usually prepared?

Better Banking Group

DIRECT ACCESS BANK STATEMENT

NV Supplies
143 Brunswick Street
TOWNSVILLE

BSB: 484-799

Account No: 0264208425

Statement period: 1 March 2009 to 31 March 2009

				Opening balance	\$6 120.00
				Total deposits	\$440.00
				Total withdrawals	\$328.40
				Closing balance	\$6 231.60
Date	Transaction details	Withdrawal	Deposit	Balance	
01 Mar 2009	Opening balance			6 120.00	Cr
04 Mar 2009	Chq 141	100.00		6 020.00	Cr
05 Mar 2009	Branch deposit – Townsville		120.00	6 140.00	Cr
09 Mar 2009	Direct debit to Minit Aust item 21	25.90		6 114.10	Cr
15 Mar 2009	Phone transfer debit to Ticketek ref no. 1659004	80.00		6 034.10	Cr
17 Mar 2009	Chq 142	120.00		5 914.10	Cr
19 Mar 2009	Direct credit – R Jackson, rent		120.00	6 034.10	Cr
20 Mar 2009	Branch deposit – Kirwan		200.00	6 234.10	Cr
31 Mar 2009	Account-keeping fees	2.50		6 231.60	Cr
Statement No: 20				page 1 of 1	

- Following are details of NV Supplies' accounts. This business's bank account balance in the general ledger was \$6 220 Dr as at 1 March 2009. NV Supplies' bank statement has been provided. Complete a bank reconciliation statement for NV Supplies as at 31 March 2009.

NV Supplies Cash receipts journal (extract)

Mar 5	Sales item 261	120.00
20	Sales item 21	200.00

NV Supplies Cash payments journal (extract)

Mar 1	141	Inventories	100.00
10	142	Inventories	120.00

Reconciliation process – previous bank reconciliation

After completing the first bank reconciliation, in the period following there is a need to take into consideration the previously prepared bank reconciliation statement. The steps stay basically the same. The few additional procedures to the process are highlighted below. To reconcile these two sets of records shown in [3.10], follow the steps listed below and previously illustrated in [3.9].

Step 1



Match items that agree

- a** Tick all items that agree in the cash receipts journal and **the previous bank reconciliation statement** with the credit column of the bank statement (e.g. deposits).
- b** Tick all items that agree in the cash payments journal and **the previous bank reconciliation statement** with the debit column of the bank statement (e.g. presented cheques).

Step 2



Account for items that do not agree

- a** Circle all items that are not ticked in the cash journals, **the previous bank reconciliation statement** and the bank statement.
- b** Add the circled items from the credit column of the bank statement to the cash receipts journal.
- c** Add the circled items from the debit column of the bank statement to the cash payments journal.
- d** Correct errors.
 - i** If it is a bank error, adjust the bank reconciliation statement (either add or subtract the value, depending on the type of error).
 - or**
 - ii** If it is the business's error, enter the required adjustment in the cash journal that contains the error.

Not applicable
at this stage



Step 3



Prepare the bank reconciliation statement

- a** Start with the final bank statement balance for the stated period.
- b** Record all circled items from the cash receipts journal (deposits not yet credited).
- c** Record all circled items from the cash payments journal (unpresented cheques).
- d** Record all circled items from **the previous bank reconciliation statement**.

Step 4



Complete the process

- a** Total both journals and post to the bank account in the general ledger. (Balance a T-format ledger account.)
- b** Calculate the adjusted total of the bank statement from the bank reconciliation statement.
- c** Check that the balance from step 4a equals the final total of step 4b.

Applying these steps to the records illustrated in [3.10] will help you understand this process.

[3.10]

**Statement of account with
The Trust Bank Brisbane Qld 4000**

Price Attack Account number 4005 0034 1301

Date	Transactions	Debit	Credit	Balance
2009				
Jul 1	Opening balance			10 175.10 Cr
	Credit interest (Auth#16182)		52.15	10 227.25 Cr
	State govt debit tax	6.90		10 220.35 Cr
	Account service fee	15.00		10 205.35 Cr
2	0459	48.60 ✓		10 156.75 Cr
	Deposit		950.00 ✓	11 106.75 Cr
	0461	1 200.00 ✓		9 906.75 Cr
8	Deposit		546.00 ✓	10 452.75 Cr
9	Deposit		1 550.00 ✓	12 002.75 Cr
	0449	340.00 ✓		11 662.75 Cr
	0460	311.65 ✓		11 351.10 Cr
10	0462	25.00 ✓		11 326.10 Cr
11	Deposit		950.00 ✓	12 276.10 Cr
20	0469	1 500.30 ✓		10 775.80 Cr
	0468	25.00 ✓		10 750.80 Cr
	0466	25.00 ✓		10 725.80 Cr
21	Deposit		1 500.00 ✓	12 225.80 Cr
25	0465	26.00 ✓		12 199.80 Cr
	Current balance			12 199.80 Cr
Date of issue	Page no.	Total debits	Total credits	
31/07/09	62	\$3 523.45	\$5 548.15	

**Price Attack
Cash receipts journal (extract)**

Date	Rec no.	Particulars	Bank
2009			Dr ✓
Jul 1	CRS	Rent revenue	1 550.00 ✓
9	138	V Lake	950.00 ✓
10	CRS	Sales	546.00
20	139	H Luu	1 500.00
30	140	Commission revenue	35.00
31	141	Sales	36.00
	BS	Interest revenue	52.15
			<u>\$4 669.15</u>
			(3103)

**Price Attack
Cash payments journal (extract)**

Date	Chq no.	Particulars	Bank
2009			Cr ✓
Jul 6	459	Inventories	48.60 ✓
4	460	Inventories	311.65 ✓
7	461	Wages	1 200.00
8	462	Stationery	25.00
10	463	Rates	650.50 ✓
14	464	Cleaning expenses	300.50 ✓
17	465	L McVea	26.00
26	466	Commission – C Kidd	25.00 ✓
29	467	Commission – G Marsden	25.00 ✓
	468	Commissions – L Leary	25.00
	469	Wages	1 500.30
	470	Stationery	25.70
	471	Power	2 600.00
31	BS	Bank charges (state govt debit tax)	6.90
	BS	Bank charges (account service fees)	15.00
			<u>\$6 785.15</u>
			(3103)

**Price Attack
Bank reconciliation statement
as at 30 June 2009**

Credit balance as per bank statement	10 175.10
Add Deposits not yet credited	950.00 ✓
	11 125.10
Less Unpresented cheque no. 0449	340.00 ✓
0458	320.00
	660.00
Debit balance as per bank a/c	\$10 465.10

**Price Attack
Bank reconciliation statement
as at 31 July 2009**

Credit balance as per bank statement	12 199.80
Add Deposits not yet credited	35.00
	36.00
	12 270.80
Less Unpresented cheque no.	
0458	320.00
0463	650.50
0464	300.50
0467	25.00
0470	25.70
0471	2 600.00
	3 921.70
Debit balance as per bank a/c	\$8 349.10

**Price Attack
General ledger (extract)**

2009	2009
3103	Bank a/c
Jul 1 Balance b/d	10 465.10
31 Receipts	<u>4 669.15</u>
	<u>\$15 134.25</u>
Aug 1 Balance b/d	8 349.10
Jul 31 Payments	6 785.15
	<u>Balance c/d</u> 8 349.10
	<u>\$15 134.25</u>

**Price Attack
General ledger (extract)**

Date	Particulars	Debit	Credit	Balance
		\$	\$	\$
2009				
3103 Bank a/c				
Jul 1	Balance			10 465.10 Dr
31	Receipts	4 669.15		15 134.25 Dr
	Payments		6 785.15	8 349.10 Dr

Review & practice 5

H Wills has provided you with the following information and asks you to complete her cash journals and bank account. In addition, she requires you to prepare a bank reconciliation statement for February.

H Wills Bank reconciliation statement as at 31 January 2010

Credit balance as per bank statement	\$ 734.00
<i>Add</i> Deposit not yet credited	58.65
	<u>792.65</u>
<i>Less</i> Unpresented cheque no. 843	125.00
Debit balance as per bank a/c	<u>\$667.65</u>

H Wills Cash receipts journal (extract)

Date 2010	Rec no.	Particulars	Bank Dr \$
Feb 4	CRS	Sales	175.00
7	210	Commission revenue	15.00
12	211	B Joyce	89.40
16	CRS	Sales	215.65
18	212	N Leah	68.00
20	CRS	Sales	149.45
24	213	E Poultney	136.75
27	214	F Rosales	139.00
28	CRS	Sales	200.80

H Wills Cash payments journal (extract)

Date 2010	Chq no.	Particulars	Bank Cr \$
Feb 3	847	K Barker	150.65
9	848	Inventories	263.90
11	849	Telephone expenses	57.30
16	850	S Brown	180.00
21	851	L Guenzler	94.35
24	852	Inventories	150.00
27	853	Wages	400.00
28	854	Plant and equipment	1 050.00



Statement of account H Wills				
Date	Transactions	Debit \$	Credit \$	Balance \$
2010				
Feb 1	Opening balance			734.00 Cr
	Deposit		58.65	792.65 Cr
	Credit bank interest		5.00	797.65 Cr
	Account service fee	3.50		794.15 Cr
	State govt debit tax	2.05		792.10 Cr
4	Deposit		175.00	967.10 Cr
7	Deposit		15.00	982.10 Cr
9	848	263.90		718.20 Cr
11	849	57.30		660.90 Cr
12	Deposit		89.40	750.30 Cr
16	Deposit		215.65	965.95 Cr
	847	150.65		815.30 Cr
18	Deposit		68.00	883.30 Cr
20	Deposit		149.45	1 032.75 Cr
	Debit cheque book	3.00		1 029.75 Cr
24	Deposit		136.75	1 166.50 Cr
	852	150.00		1 016.50 Cr
27	Deposit		139.00	1 155.50 Cr
	853	400.00		755.50 Cr
28	Deposit		200.80	956.30 Cr
	Current balance			956.30 Cr

► Exercises 3.27 and 3.28, pages 245–6

Complex bank reconciliations

Learning objective 3 There are three additional issues to analyse and apply to this topic:

- bank overdrafts
- dishonoured and returned cheques
- errors.

Bank overdrafts

An overdraft is a liability as opposed to an 'overdrawn' bank account, which is still classified as an asset.

If a business has insufficient funds to finance its operations, it may apply for a **bank overdraft** from the bank. If operating under a bank overdraft, the business's balance would be shown as a debit balance in the bank statement and a credit balance in the business's bank account in the general ledger. Therefore, the bank reconciliation statement would take the following form.

Bank reconciliation statement as at 30 June 20XX (extract)

DEBIT balance as per bank statement	xxx
Add Unpresented cheques	xxx
Less Deposits not yet credited	xxx
CREDIT balance as per bank account	xxx

This could revert to a debit balance if deposits were more than the sum of the debit balance (current overdraft) and unpresented cheques.

All steps in the bank reconciliation statement are the same except for the presentation of the final statement.

With a bank overdraft, unpresented cheques are added to the overdraft balance (increasing the overdraft) and deposits not yet credited are subtracted (decreasing the overdraft).

► Exercise 3.29, page 246

Dishonoured and returned cheques

Customers' cheques can be dishonoured or returned for a variety of reasons. Some common reasons are shown below.

Cheques are considered **stale** if not presented within 18 months from the date on the cheque.

- There are insufficient funds available in the bank account to cover the value of the cheque. This is a dishonoured cheque. ← **Dishonoured cheque**
 - The cheque is not signed.
 - The cheque is stale (out of date).
 - The drawer's account may be closed.
 - The signature on the cheque is not authorised.
 - The cheque has been altered without authority.
 - The cheque form is improper (a counterfeit).
- Returned cheques (not cleared)**

In these circumstances, the bank will advise the business by letter that the cheque will be returned and not cleared for payment, or that it has been dishonoured. Note that, when a cheque is dishonoured, the drawer owes the original debt plus the bank charges that apply.

As the business would have already recorded the cheque as cash received, an adjusting entry is necessary. This entry can be made in the general journal or cash payments journal.

The approach below shows the entry through the cash payments journal. The amount of the original deposit is written against the customer's name and marked 'dishonoured'. This entry has the effect of decreasing the cash previously recorded as received through the cash receipts journal. In addition, the bank charges an unpaid cheque fee for the administration and recording of the reversal due to being returned as dishonoured. This entry also has the effect of decreasing the cash position of the business.

Cash payments journal (extract)

Date 2009	Chq no.	Particulars	Other Dr \$	Bank Cr \$
Sep 30	BS	Accounts receivable – K Rowell (dishonoured cheque)	345.00	345.00
	BS	Accounts receivable – K Rowell (bank charges)	30.00	30.00

The word 'dishonoured' should be replaced by 'returned' if appropriate.

The unpaid cheque fee charged to the business when a cheque is dishonoured is recorded in the cash payments journal as the accounts receivable's name so that this charge is passed on to the debtor. A general journal entry would be made to record this adjustment.

The ledger account for K Rowell would appear as follows:

General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
K Rowell					
Sep 1	Balance b/d	345.00	Sep 10	Bank	345.00
30	Bank (dishonoured cheque)	345.00		Balance c/d	375.00
	Bank (bank charges)	30.00			
		<u>\$720.00</u>			<u>\$720.00</u>
Oct 1	Balance b/d	375.00			

General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
K Rowell				
Sep 1	Balance			345.00 Dr
10	Bank		345.00	0
30	Bank (dishonoured cheque)	345.00		345.00 Dr
	Bank (bank charges)	30.00		375.00 Dr

K Rowell now owes the original \$345 plus the bank charges of \$30.



Errors

Errors can be made by the bank and/or the business.

Bank errors

If the error has been made by the bank, the business will notify the bank and, following investigation, the bank may correct the error on the next bank statement. The business cannot adjust the bank's records but can record the desired correction in the bank reconciliation statement for checking when the next bank statement is received. Assume the bank has made an error in the amount of a deposit stated on the bank statement. The amount reads \$101 instead of \$111. The bank has under-credited the business's account by \$10. Assuming the current balance as per the bank statement is in credit, the \$10 would be added as a last step in the bank reconciliation statement before the bank figure was calculated.

This error would be subtracted if the bank statement had a debit balance.

Bank reconciliation statement (extract)	
	\$
Credit balance as per bank statement	
Add Deposits not yet credited	
Less Unpresented cheques	
Add Bank error (\$111 – \$101)	10
Debit balance as per bank a/c	

Errors may also occur in the recording of cheques by the bank. As situations vary, each error needs to be analysed separately to see whether there has been an under- or over-recording, and the appropriate correction made. It is important to remember that bank errors are corrected by the business in the bank reconciliation statement and by the bank in the next bank statement.

Business errors

The general journal is more suitable for correcting errors made at a later time.

Any errors made by the business are usually corrected in either the cash receipts or cash payments journal. If the error is immediately recognised, the correction can be made in the usual way. If the error is undetected until the reconciliation process, an entry correcting the situation can be made in either the appropriate cash journal or the general journal. For example, if the business recorded a cheque payment to K Williams for \$60 in the cash payments journal instead of \$66, the following adjusting entry would be made:

Best practice suggests any error should be taken out of the books in full and the correct amount re-entered.

Cash payments journal (extract)			
Date 2009	Chq no.	Particulars	Bank Cr \$
Sep 30	BS	K Williams (correction of error)	(60.00)
	BS	K Williams (correction of error)	66.00

Consider an alternative situation in which a receipt from L Lazaredis was recorded as \$55 in the cash receipts journal instead of \$50. As the amount recorded is too high, receipts are overstated by \$5. The correction would appear in the cash receipts journal to adjust the cash situation.

Cash receipts journal (extract)			
Date 2009	Rec no.	Particulars	Bank Dr \$
Sep 30	BS	L Lazaredis (correction of error)	(55.00)
	BS	L Lazaredis (correction of error)	50.00

EXAMPLE 4

This example illustrates a complete bank reconciliation process. Any errors are assumed to have been made by the bank.

Bowtell Boat Supplies
Bank reconciliation statement
as at 31 August 2009

Credit balance as per bank statement		\$ 4 375.00
Add Deposits not yet credited		750.00 ✓
		5 125.00
Less Unpresented cheque no. 00119	329.00	
00122	847.00 ✓	1 176.00
Debit balance as per bank a/c		\$3 949.00

STATEMENT OF ACCOUNT
WITH THE TRUST BANK
BRISBANE QLD 4000

BOWTELL BOAT SUPPLIES Account number: 5629 8590 5608

Date	Transaction	Debit \$	Credit \$	Balance \$
2009				
Sep 1	Opening balance			4 375.00 Cr
	Deposit		750.00 ✓	5 125.00 Cr
	Merchant service charge	86.42		5 038.58 Cr
	POS fee	45.18		4 993.40 Cr
	Account service fee	10.00		4 983.40 Cr
	State govt debit tax	2.60		4 980.80 Cr
3	Deposit		250.00 ✓	5 230.80 Cr
5	Deposit		500.00 ✓	5 730.80 Cr
	EFTPOS deposit		700.00 ✓	6 430.80 Cr
7	00122	847.00 ✓		5 583.80 Cr
	00123	1 365.00 ✓		4 218.80 Cr
10	00124	615.00 ✓		3 603.80 Cr
11	Credit rent (Auth#18745)		140.00	3 743.80 Cr
	Deposit		450.00 ✓	4 193.80 Cr
	EFTPOS deposit		800.00 ✓	4 993.80 Cr
14	00125	1 489.00 ✓		3 504.80 Cr
17	Deposit		*357.00 ✓	3 861.80 Cr
18	00126	475.00 ✓		3 386.80 Cr
26	Deposit		600.00 ✓	3 986.80 Cr
	EFTPOS deposit		725.00 ✓	4 711.80 Cr
27	Deposit		345.00 ✓	5 056.80 Cr
28	Reversal – insufficient funds	345.00		4 711.80 Cr
	Unpaid cheque fee	30.00		4 681.80 Cr
30	00127	4 000.00 ✓		681.80 Cr
	Debit interest on loan	1 200.00		518.20 Dr
	Current balance			518.20 Dr
Date of issue	Page number	Total debits	Total credits	
30/09/09	25	\$10 510.20	\$5 617.00	

* An asterisk indicates that, although the items match, there is an error in the recorded amount.



Bowtell Boat Supplies
Cash receipts journal (extract)

Date 2009	Rec no.	Particulars	Bank Dr \$
Sep 3	068	D Cox	250.00 ✓
5	CRS	Sales	500.00 ✓
	CRS	EFTPOS sales	700.00 ✓
11	CRS	Sales	450.00 ✓
	CRS	EFTPOS sales	800.00 ✓
17	069	F Alauddin	*375.00 ✓
26	CRS	Sales	600.00 ✓
	CRS	EFTPOS sales	725.00 ✓
27	070	K Rowell	345.00 ✓
30	BS	Rent revenue	140.00
			\$4 885.00
			(3103)

Bowtell Boat Supplies
Cash payments journal (extract)

Date 2009	Chq no.	Particulars	Bank Cr \$
Sep 4	00123	Inventories	1 365.00 ✓
7	00124	M Blakeney	615.00 ✓
14	00125	Inventories	1 489.00 ✓
17	00126	J Grundy	475.00 ✓
28	00127	Wages	4 000.00 ✓
29	00128	Cleaning	150.00
30	BS	Credit/debit card fees (merchant service charge)	86.42
	BS	Credit/debit card fees (POS fee)	45.18
	BS	Bank charges (account service fee)	10.00
	BS	Bank charges (state govt debit tax)	2.60
	BS	K Rowell	345.00
	BS	Bank charges (unpaid cheque fee)	30.00
	BS	Interest on loan	1 200.00
			\$9 813.20

Bowtell Boat Supplies
General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
				Bank a/c	
Sep 1	Balance b/d	3 949.00	Sep 30	Payments	9 813.20
30	Receipts	4 885.00			
	Balance c/d	979.20			
		\$9 813.20			\$9 813.20
			Oct 1	Balance b/d	979.20

Bowtell Boat Supplies
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Bank a/c			
Sep 1	Balance			3 949.00 Dr
30	Receipts	4 885.00		8 934.00 Dr
	Payments		9 813.20	979.20 Cr



Bowtell Boat Supplies
Bank reconciliation statement
as at 30 September 2009

	\$	\$
Debit balance as per bank statement		518.20
Add Unpresented cheque no. 00119	329.00	
00128	150.00	
	<u>479.00</u>	
		997.20
Less Deposits not yet credited ¹		—
		<u>997.20</u>
Less Bank error (receipt no. 069 \$375 – \$357) ²		18.00
Credit balance as per bank a/c		<u>\$979.20</u>

¹As there are no deposits outstanding, it is not essential to record this information.

²With reference to the bank error, the deposit was correctly recorded as \$375 by the business. The bank subsequently was in error and only credited the account for \$357 (\$18 under-recorded). Because the current balance as per the bank statement is debit, the amount of the error has been subtracted to reduce the amount owed by the business to the bank.

✓ Helpful hints

Bank errors:

- If the business's bank account should *increase*, *add* to the bank reconciliation statement's credit balance.
- If the business's bank account should *decrease*, *subtract* from the bank reconciliation statement's credit balance.

Business errors:

- Correct the error in the cash receipts, cash payments or general journal.

Review & practice 6

- a** Prepare the cash journals, bank account and a bank reconciliation statement for the month of December from the following records:

N Day
Bank reconciliation statement
as at November 2010

	\$	\$
Debit balance as per bank statement		5 986.00
Add Unpresented cheque no. 427	300.00	
429	132.00	
	<u>432.00</u>	
		6 418.00
Less Deposits not yet credited		<u>254.00</u>
Credit balance as per bank a/c		<u>\$6 164.00</u>



N Day
Cash receipts journal (extract)

Date 2010	Rec no.	Particulars	Bank Dr \$
Dec 3	CRS	Sales	5 200.00
5	544	Commission revenue	145.00
8	CRS	Sales	10 215.00
15	545	Interest revenue	30.00
27	546	T Burnett	5 250.00
30	547	H Bui	1 800.00
31	CRS	Sales	3 000.00

N Day
Cash payments journal (extract)

Date 2010	Chq no.	Particulars	Bank Cr \$
Dec 4	432	Inventories	5 200.00
7	433	L Ferguson	6 250.00
8	434	N Hauser	5 750.55
12	435	Equipment	8 900.00
	436	Wages	4 500.00
14	437	Inventories	4 330.30
26	438	A O'Gorman	7 000.00
	439	Wages	4 500.00
29	440	Advertising	420.00

**STATEMENT OF ACCOUNT
N DAY**

Date	Transaction	Debit \$	Credit \$	Balance \$
2010	Opening balance			5 986.00 Dr
Dec 1	Deposit		254.00	5 732.00 Dr
	State govt debit tax	3.50		5 735.50 Dr
3	Deposit		5 200.00	535.50 Dr
5	Deposit		145.00	390.50 Dr
8	Deposit		10 215.00	9 824.50 Cr
10	432	5 200.00		4 624.50 Cr
	434	5 750.55		1 126.05 Dr
12	433	6 250.00		7 376.05 Dr
	436	4 500.00		11 876.05 Dr
15	Deposit		30.00	11 846.05 Dr
	437	4 330.30		16 176.35 Dr
17	Credit – interest on bonds		1 000.00	15 176.35 Dr
26	439	4 500.00		19 676.35 Dr
27	Deposit		5 250.00	14 426.35 Dr
28	Reversal – insufficient funds	5 250.00		19 676.35 Dr
	Unpaid cheque fee	30.00		19 706.35 Dr
30	Deposit		1 800.00	17 906.35 Dr
	440	420.00		18 326.35 Dr
	427	300.00		18 626.35 Dr
	Current balance			18 626.35 Dr



- b** Study the following letter and identify the various sections. Examine the nature of the language used and the clarity of the message. Write a reply in an accepted letter format that grants the overdraft facility.

BOWTELL BOAT SUPPLIES
531 Riverview Street
BRISBANE QLD 4000

Telephone: (07) 3202 6744
Facsimile: (07) 3202 9673

28 September 2009

Ms L Symons
 Manager
 The Trust Bank
 800 George Street
 BRISBANE QLD 4000

Dear Ms Symons

BANK OVERDRAFT

I would like to arrange a bank overdraft of up to \$2 000.00 for my business for the month of October 2009. The situation should not extend beyond October as large debts owing to the business are expected to be collected late in the same month.

I would appreciate your approval of my request.

Yours sincerely

B Bowtell

B BOWTELL
 Managing Director



- c** There was a bank error recorded in the bank reconciliation statement sent to your business as at 30 May 2009. However, you have just reviewed the bank statement for June 2009 and the bank has not corrected this error. Write an office memo advising your accounting staff how to record this continuing bank error so as to achieve a bank reconciliation between the bank's records and the records of your business.

► Exercises 3.30 to 3.40, pages 246–56

Computer applications

Learning objective 4

With technological developments in the business environment, the bank reconciliation process can be completed within computerised accounting software applications. There are many software packages available and all may differ. However, the general process is very similar and may still involve some type of manual check of the business's computer records of cash received and paid. This may be compared with a statement of transactions downloaded from the bank.

A bank reconciliation statement generated within a computerised accounting package is similar to a manually prepared bank statement.

EXAMPLE 5

C Roberts commenced business on 6 June 2009, trading as a superannuation consultant. C Roberts wishes to use a computerised accounting system and has presented you with the following information regarding transactions for the month of June. You have also been given the bank statement received at the end of June.

- Jun 6 Deposited \$5 000 into the business's bank account. C Roberts also contributed a motor vehicle worth \$12 000 and office equipment valued at \$6 000 to the business
- 9 Service fees revenue billed to a client, J Robinson – \$2 500
- 15 Paid \$220 for rent to W Fletcher
- 17 Received part payment of \$1 000 cash from J Robinson
- 21 Paid \$240 for the printing of office stationery to Quick Print Pty Ltd
- 29 Received cash of \$1 000 for consultancy services
- 30 C Roberts drew a cheque for \$300 for personal use

STATEMENT OF ACCOUNT WITH TRUSTUS BANK MACKAY BRANCH

C ROBERTS Account number: 56789330

Date	Transaction	Debit \$	Credit \$	Balance \$
2009				
Jun 6	Deposit		5 000.00	5 000.00 Cr
	Account fees and cheque book	15.00		4 985.00 Cr
16	CHQ 00001	220.00		4 765.00 Cr
17	Deposit – J Robinson		1 000.00	5 765.00 Cr
28	CHQ 00002	240.00		5 525.00 Cr
30	Reversal – insufficient funds	1 000.00		4 525.00 Cr
	Unpaid cheque fee	20.00		4 505.00 Cr



Steps

- 1 Enter the transactions for the month of June into a computerised accounting system.
- 2 In order to determine the differences between the bank statement and the business's cash account, perform an initial reconciliation.
- 3 To update the cash records, prepare a general journal entry to record any bank charges/fees (or other direct debits or credits) indicated on the bank statement.
- 4 To correct any errors made by the business, reverse the original transaction and re-enter the correct amount.
- 5 To record a dishonoured cheque received by the business as indicated by the bank statement as 'insufficient funds', reverse the original receipt of payment by the accounts receivable and charge any bank fees incurred as a result of the dishonoured cheque to the accounts receivable involved.
- 6 Finalise the reconciliation process, incorporating any changes as per the bank statement.
- 7 Print out a reconciliation report.



Note that the computerised version of a bank reconciliation statement commences with the bank account balance and ends with the balance as per the bank statement.

C Roberts Reconciliation report				
	A	B	C	
	ID#	Date	Payee	
				D Deposit
				E Withdrawal
1	Cheque account: 1-1110	Cheque Account		
2	Last reconciled:			
3	Last reconciled balance: \$.00			
4	Cleared cheques			
5	1	15/6/09	W Fletcher	\$220.00
6	2	28/6/09	Quick Print Pty Ltd	\$240.00
7	0000003	30/6/09	Sale; J Robinson	\$20.00
8	CR000003	30/6/09	Reversal: CR000001; J Robinson	\$1000.00
9	GJ000002	30/6/09	Bank charges (B/S)	\$15.00
10			Total:	\$1495.00
11	Cleared deposits			
12	GJ000001	6/6/09	Opening entry	\$5000.00
13	CR000001	17/6/09	Payment; J Robinson	\$1000.00
14			Total:	\$6000.00
15	Outstanding cheques			
16	3	30/6/09	C Roberts	\$300.00
17			Total:	\$300.00
18	Outstanding deposits			
19	CR000002	29/6/09	Cash sales for 00000002	\$1000.00
20			Total:	\$1000.00
21	Reconciliation:			
22	Current system balance:			\$5205.00
23	Add: outstanding cheques:			\$300.00
24	Sub-total:			\$5505.00
25	Deduct: outstanding deposits:			\$1000.00
26	Expected balance on bank statement:			\$4505.00
27				

► Exercises 3.41 and 3.42, pages 256–8

Understandings

- In manual accounting, if every transaction resulted in an entry into an account, the size of the ledger would be unmanageable. Therefore, there is a need for a device to take some of the unnecessary detail out of the ledger. This device is called a journal.
- Specialised journals classify like items together and act as an aid for posting to the ledger by analysing the transaction into its debit and credit components.
- A bank reconciliation brings into agreement the business's records of its bank account with the bank's records of the business's account after all outstanding transactions have been accounted for.

► Exercise 3.43 [decision-making], page 258

Exercises

★★ 3.1 Cash receipts journal

K Jennings operates a small business that sells rugby memorabilia. The following are the transactions for the week ended 6 June 2009. Enter the transactions into the cash receipts journal and total the journal at the end of the week.

2009

See also chapter 9,
R&P6, page 481.

- Jun 2 K Jennings paid \$1 500 as capital into the business's account (receipt no. 001)
- 3 Sold memorabilia medals for \$352 cash (CRS) gross, GST applies
- 4 EFTPOS sale of posters of the rugby teams for \$88 gross, GST applies
Sold 20 packets of hero cards for \$160 (CRS) net of GST, GST applies
Sold signed jerseys for \$561 gross (CRS), GST applies
- 5 Received rent for \$1 210 (including GST) for office space owned by the business (receipt no. 003)
- 6 Received commission on volume of sales from manufacturer, \$44 including GST (receipt no. 004)
Sold 10 packets of swap cards for \$176 and three packets of rugby socks for \$55 (CRS). Both prices are gross, and GST applies
D Warby paid her account of \$163 (receipt no. 005)

★★ 3.2 Cash receipts journal

For the business of E Leeves, complete the cash receipts journal for the following transactions. Total the journal at the end of the month.

Cash register summary				
Date 2009	Item no.	GST \$	Gross amount \$	
Mar 3	33	5	55	
10	30	20	220	
15	10	26	286	
22	15	8	88	
27	12	8	88	

EFTPOS duplicate voucher				
Date 2009	Item no.	GST \$	Gross amount \$	
Mar 4	15	20	220	
15	17	10	110	

Summary duplicate receipts					
Date 2009	Amount received \$	Receipt details	Item	GST \$	Receipt no.
Mar 3	2 005	J Saunders			204
10	250	J Mann			205
	154	Commission received		14	206
18	2 200	Rent from J Ingles		200	207

★ 3.3 Cash receipts journal to ledger

Post to the ledger the cash receipts journal completed in exercise 3.1.

★ 3.4 Cash receipts journal to ledger

Post to the ledger the cash receipts journal completed in exercise 3.2.

★ 3.5 Cash receipts journal to ledger

The following has been retrieved from the accounting records of Liz Mackay. Post the information to the ledger as at 31 August 2009.

Liz Mackay Cash receipts journal									
Date 2009	Rec no./ref	Particulars	Post ref	Sales Cr \$	Service revenue Cr \$	Other Cr \$	Accounts receivable Cr \$	GST clearing Cr \$	Bank Dr \$
Aug	8 127	Capital				6 000			
	CRS	Sales		40 000				4 000	50 000
	12	CRS			31 240			3 124	
	128	Accounts receivable – R Manning					450		34 814
	22	CRS		60 000				6 000	
	129	Accounts receivable – T Boulton					2 000		
		Rent revenue				5 600		560	74 160
	31	BS							
		Service revenue – M Marr			650			65	715
				\$100 000	\$31 890	\$11 600	\$2 450	\$13 749	\$159 689

★ 3.6 Cash receipts journal to ledger

Following is an extract from Christies' cash receipts journal. Post the information to the ledger as at 30 September 2009 and take out a trial balance.

Christies Cash receipts journal (extract)									
Date 2009	Rec no./ref	Particulars	Post ref	Sales Cr \$	Service revenue Cr \$	Other Cr \$	Accounts receivable Cr \$	GST clearing Cr \$	Bank Dr \$
Sept	27 943	Accounts receivable – L Robinson					12 500		
	947	Accounts receivable – N Mackay					299 450		
	30	Commission revenue				600			
				\$650 256	\$13 000	\$600	\$311 950	\$45 222	\$1 021 028

★ 3.7 Cash receipts journal to ledger

Following is an extract from *Rock Magazine's* cash receipts journal. Post the information to the ledger as at 31 October 2009 and take out a trial balance.

Rock Magazine Cash receipts journal (extract)									
Date 2009	Rec no./ref	Particulars	Post ref	Sales Cr \$	Service revenue Cr \$	Other Cr \$	Accounts receivable Cr \$	GST clearing Cr \$	Bank Dr \$
Oct	14 741	Accounts receivable – R Leylani					30 220		
	742	Accounts receivable – R Noah					300		
	31	Interest revenue				1 700			
				\$70 700	\$3 082	\$1 700	\$30 520	\$6 707	\$112 709

★ 3.8 Cash payments journal

For the business of T Downs, complete the cash payments journal for the following transactions. Total the journal at the end of the month. Cheque numbers start at 489.

2009

Nov	1	Paid rent \$4 400 (including GST)
	7	Paid wages \$6 580
	10	Bought tyres for cash to add to inventory, \$11 011 (GST included)
	15	Paid G Voyle's outstanding account of \$670
	15	Drew a petty cash cheque for \$517 for reimbursement of stationery (\$330) and postage (\$187). GST applies

★ 3.9 Cash payments journal

For the business of Golf World, complete the cash payments journal for the following transactions. Total the journal at the end of the month. Cheque numbers start at 987.

2009

Nov	1	Paid for the printing of the instruction booklets to be given to each golfer before the start of play \$1 210 (including GST)
	8	Paid parking fines, \$580 plus 10% GST
	10	Bought golf gloves for cash for sale at the Pro Shop \$2 145 (GST included)
	16	Paid A Bradley's outstanding account of \$25 670
	16	The owner withdrew \$500 cash for own use

★ 3.10 Cash payments journal to ledger

Post to the general ledger the entries from the cash payments journal prepared in exercise 3.8.

★ 3.11 Post to the ledger the entries from the cash payments journal

Post to the general ledger the entries from the cash payments journal prepared in exercise 3.9.

★ 3.12 Cash payments journal to ledger

Below is the cash payments journal of Athletics World. Post the information to the general ledger for the month of August 2009.

Athletics World
Cash payments journal

Date 2009	Chq no.	Particulars	Post ref	Inventories	Wages	Other	Accounts payable	GST clearing	Bank
				Dr \$	Dr \$	Dr \$	Dr \$	Dr \$	Cr \$
Aug	1 167	Inventories		1 500				150	1 650
	168	Wages			18 000				18 000
	5 169	Inventories		1 600				160	1 760
	10 170	Commission expense				660		66	726
	171	Accounts payable – J Robinson					2 300		2 300
	15 172	Rates				6 250			6 250
	31 173	Drawings				400			400
				\$3 100	\$18 000	\$7 310	\$2 300	\$376	\$31 086

★ 3.13 Cash payments journal to ledger

Below is the cash payments journal of Bike World. Post the information to the general ledger for the month of October 2009.

Bike World Cash payments journal									
Date 2009	Chq no.	Particulars	Post ref	Inventories	Wages	Other	Accounts payable	GST clearing	Bank
				Dr \$	Dr \$	Dr \$	Dr \$	Dr \$	Cr \$
Oct	1 671	BMX wheels		3 560				356	3 916
	672	Wages			20 000				20 000
	5 673	Bike shorts		950				95	1 045
	10 674	Electricity				560		56	616
	675	Accounts payable – N Doolan					14 550		14 550
	15 676	Telephone account				1 570		157	1 727
	31 677	Drawings				650			650
				\$4 510	\$20 000	\$2 780	\$14 550	\$664	\$42 504

★ 3.14 Cash payments journal to ledger and trial balance

Below is an extract of the cash payments journal of Game Mania. Post the information to the general ledger for the month of December 2009 and take out a trial balance.

Game Mania Cash payments journal (extract)									
Date 2009	Chq no.	Particulars	Post ref	Inventories	Wages	Other	Accounts	GST payable	Bank clearing
				\$ Dr	\$ Dr	\$ Dr	\$ Dr	\$ Dr	\$ Cr
Dec	10 331	Accounts payable – S Lourigan					5 500		
	15 332	Accounts payable – G Gambit					4 800		
	31 333	Drawings				1 200			
				\$4 530		\$1 200	\$10 300	\$453	\$16 483

★★ 3.15 Cash journals to ledger and trial balance

Complete the cash journals for Dandenong Trading.

2009

- Dec 1 Received cash from sales \$4 500 (plus GST)
- 4 Paid wages \$6 200
- 6 Paid supplier Accounts payable – C Kiolle \$3 400
- 9 Received cash from owner as an additional contribution of capital \$20 000
- Cash sales \$8 700 (plus GST)
- Purchased inventories and paid by cheque \$14 000 (plus GST)
- 12 Paid cash for office stationery supplies \$880 (including GST)
- 17 Customer, Accounts receivable – P Newell paid \$1 200 cheque for consultancy fees previously billed
- Cash sales \$9 100 (plus GST)
- 18 Cheque for \$440 sent to M Wilkinson for accounting services
- 21 Paid cheque for \$22 (including GST) to a customer who returned goods purchased on 1 December
- 25 Wrote one cheque to pay wages of \$3 800 and to reimburse petty cash \$108 (courier charges of \$55 (including GST), \$20 for milk for the office (no GST) and office stationery \$33 (including GST))
- 28 Purchased inventories for cash \$22 000 (including GST)



- 29 Paid wages \$3 900
- 31 Bank advised through bank statement that bank charges totalled \$43 for the month
Cheque banked on 17 December from P Newell has been returned due to insufficient funds in the account. Reverse the receipt of \$1 200

★★ 3.16 Cash journals to ledger and trial balance

Complete the cash journals for Yanna Enterprises.

2009

- Mar 1 Received cash from sales \$5 500 (plus GST)
- 3 Wrote cheque to pay wages \$6 100
Cash sales \$10 010 (including GST)
Received cash from Accounts receivable – B Keisieker \$5 500
- 7 Paid supplier Accounts payable – P Creese \$3 500
- 9 Owner withdrew cash \$10 000
Paid by cheque for inventories \$15 000 (plus GST)
- 13 Paid cash for office stationery supplies \$880 (including GST)
- 17 Customer, Accounts receivable – C Bennett, paid \$1 100 cheque for service fees previously billed
Cash sales \$2 200 (including GST)
- 19 Cheque for \$550 paid for electricity
- 20 Paid cheque for \$220 (including GST) to a customer who returned goods purchased on 3 March
- 21 Wrote cheque to reimburse petty cash \$193 (donation \$50 (no GST), office stationery \$44 (including GST) and courier charges \$99 (including GST))
- 23 Purchased inventories for cash \$11 000 (including GST)
Cash sales \$9 570 (including GST)
- 28 Paid wages \$3 900
Paid rates \$1 900 (no GST)
- 31 Bank advised through bank statement that bank charges totalled \$72 for the month.
Bank statement investigation revealed that we had incorrectly recorded the receipt of returned inventories to supplier. These inventories were purchased for cash on 23 March. We received a cheque for \$715 (including GST) from supplier of inventories

★★ 3.17 Cash journal to ledger and trial balance

S Norton owns and operates Healthy Camping Corner, an outdoor activities store that stocks a large variety of equipment. Ms Norton closes off her journals at the end of each week. The following transactions took place during the first week of February 2010. Enter the transactions into the relevant cash journals and post to the ledger at the end of the week, then complete a trial balance as at 6 February 2010. Ms Norton's first available cheque is number 92 and the first receipt available for use is number 166. 'Gross' indicates that GST of 10% is included in the price. 'Net' indicates that GST has not been added to the price but should be included in the overall value of the transaction.

2010

- Feb 1 Cash sales of tents, \$913 gross
Purchased with cheque camping equipment, Star Canvas DD45, \$720 net
- 2 Paid wages by cheque, \$4 000
Cash sales, \$1 760 gross
T Jack paid in full, \$1 500 by cheque
- 3 Cash purchases of camping chairs for \$520 net
S Norton deposited \$6 000 into the business's bank account
Cash return of goods sold on 1 February to the value of \$99 gross
- 4 Sold two fishing lines each at \$250 net to M Mooney for cash
Paid electricity bill of \$440 gross

- 5 Cash sales of camping chairs to the value of \$440 net
Received cheque no. 721 for \$561 gross from Jonas Fishing Supplies for payment of commission due to S Norton's business
Bought office equipment for \$1 340 net from Olly's Office Equipment for cash
Returned goods purchased for cash on 3 February to the value of \$220 gross
Paid L Paprar's outstanding account by cheque for \$250

Additional information:

- Cost price of goods sold for cash is \$1 900.
- Cost price of sales returns is \$55.

★★ 3.18 Cash journal to ledger and trial balance

B Waite owns and operates a fishing shop that sells tackle, bait and fishing equipment. Ms Waite closes off her journals at the end of each month. Enter the following transactions into the relevant cash journals and post to the ledger, then complete a trial balance as at 31 July 2010. B Waite's first cheque available is number 629 and the first receipt available for use is 332. 'Gross' indicates that GST of 10% is included in the price. 'Net' indicates that GST has not been added into the price but should be included in the overall value of the transaction.

2010

- | | | |
|-----|----|--|
| Jul | 1 | Purchased by cheque a dozen fishing rods for \$1 595 gross
Cash sales of bait, \$165 gross |
| | 3 | Paid rent on premises by cheque \$990 gross
Paid wages of \$5 700
Cash sales, \$520 net |
| | 6 | Cash purchases of tackles for \$2 520 net
Cash register summary showed sale of bait for \$704 gross |
| | 8 | Sold two fishing lines each at \$250 net to M Mooney for cash
Paid Telstra for telephone account, \$1 441 gross
Received commission from Salty's Sea Goods for \$165 gross |
| | 12 | B Waite withdrew \$200 for personal use |
| | 15 | Paid customs duty on inventory for \$66. GST is applicable |
| | 16 | C Gleeson paid her outstanding account of \$95
Paid C MacDermott's outstanding account by cheque for \$350 |
| | 18 | Drew one cheque for \$900 wages and \$300 for B Waite's personal use |
| | 19 | J Sullivan paid \$306 net for a fishing rod
Received \$154 gross for hire of dinghy to S Whittington |
| | 23 | Purchased for cash inventory fishing lines, \$875 net |
| | 25 | Cash sales of fishing lines, \$1 683 gross |

Additional information:

- Cost of goods sold for cash is \$1 290.

★★ 3.19 General journal versus cash journals

Write a paragraph explaining *why* a business would choose a general journal approach instead of a specialised journal system.

★★ 3.20 General journal versus cash journals

Explain *how* each of the differences between a general journal approach and a specialised journal approach to recording cash transactions could be advantageous or disadvantageous to a business. Structure your response into well-written paragraphs.

★★ 3.21 Bank reconciliation statement comparing records

K Clyde has received the first bank statement showing a credit balance of \$134.50, yet the bank account shows a debit balance of \$175.00. Clyde does not understand why the records do not agree. In paragraphs, write approximately 200 words explaining the main differences.

★★ 3.22 Bank reconciliation statement

Complete the bank reconciliation for Brice Services from the information provided.

Statement of account with The Trust Bank Brisbane Qld 4000				
Brice Services Account number 0145 3654 2355				
Date	Transaction	Debit \$	Credit \$	Balance \$
2009				
Jul 1	Opening balance			23 289.00 Cr
	Credit interest (Auth#35A59)		165.00	23 454.00 Cr
	State govt debit tax	32.00		23 422.00 Cr
	Account service fee	20.00		23 402.00 Cr
2	Deposit		950.00	24 352.00 Cr
7	701	2 670.50		21 681.50 Cr
	700	90.60		21 590.90 Cr
10	Deposit		250.30	21 841.20 Cr
20	704	100.00		21 741.20 Cr
	Deposit		159.00	21 900.20 Cr
21	Deposit		350.00	22 250.20 Cr
25	706	1 250.30		20 999.90 Cr
	Deposit		126.40	21 126.30 Cr
28	707	2 670.50		18 455.80 Cr
	Current balance			18 455.80 Cr
Date of issue		Page no.	Total debits	Total credits
31/07/09		32	6 833.90	2 000.70

Brice Services General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
				Bank a/c	
Jul 1	Balance c/d	23 289.00			

Brice Services General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Bank a/c			
Jul 1	Balance			23 289.00 Dr

Brice Services
Cash receipts journal (extract)

Date 2009	Rec no.	Particulars	Bank Dr \$
Jul 1	952	Rent revenue	950.00
9	CRS	Service fees	250.30
19	CRS	Service fees	159.00
20	953	Accounts receivable – G Waugh	350.00
25	954	Accounts receivable – H Foster	126.40
31	CRS	Service fees	200.00

Brice Services
Cash payments journal (extract)

Date 2009	Chq no.	Particulars	Bank Cr \$
Jul 6	699	Supplies	352.20
	700	Supplies	90.60
7	701	Wages	2 670.50
8	702	Stationery	50.65
10	703	Telephone	2 600.00
15	704	Cleaning expenses	100.00
18	705	Accounts payable – T McPhee	581.10
25	706	Office furniture	1 250.30
28	707	Wages	2 670.50

★★ 3.23 Bank reconciliation statement

Complete the bank reconciliation for G A Gardiner from the information provided.

Statement of account with The Trust Bank Brisbane Qld 4000				
G A Gardiner Account number 2355 4563 5523				
Date	Transactions	Debit \$	Credit \$	Balance \$
2010				
Sep 1	Opening balance			320.65 Cr
	Credit interest (Auth# RR629)		2.50	323.15 Cr
	State govt debit tax	12.00		311.15 Cr
	Account service fee	10.00		301.15 Cr
2	Deposit		2 256.90	2 558.05 Cr
8	Deposit		300.50	2 858.55 Cr
	897	652.30		2 206.25 Cr
10	898	1999.45		206.80 Cr
	Deposit		300.00	506.80 Cr
15	901	250.45		256.35 Cr
	Deposit		250.45	506.80 Cr
25	Deposit		2 306.25	2 813.05 Cr
	899	566.20		2 246.85 Cr
	Direct deposit – S Kann		126.40	2 373.25 Cr
28	904	1999.45		373.80 Cr
	Current balance			373.80 Cr
Date of issue	Page no.	Total debits	Total credits	
30/09/10	1056	\$5 489.85	\$5 543.00	

G A Gardiner Cash receipts journal (extract)			
Date 2010	Rec no.	Particulars	Bank Dr \$
Sep 1	CRS	Sales	2 256.90
8	CRS	Sales	300.50
9	CRS	Sales	300.00
15	222	Accounts receivable – J Cox	250.45
25	223	Accounts receivable – R Rixon	2 306.25
30	CRS	Sales	1 520.00

G A Gardiner Cash payments journal (extract)			
Date 2010	Chq no.	Particulars	Bank Cr \$
Sep 1	896	Inventories	652.35
	897	Inventories	652.30
9	898	Wages	1 999.45
	899	Rates	566.20
10	900	Telephone	333.25
12	901	Stationery	250.45
19	902	Accounts payable – S Ramsay	222.25
24	903	Equipment	2 641.10
28	904	Wages	1 999.45

G A Gardiner General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amt. \$	Date	Particulars	Amt. \$
2010			2010		
				Bank a/c	
Sep 1	Balance b/d	320.65			

G A Gardiner General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Bank a/c			
Sep 1	Balance			320.65 Dr

★★ 3.24 Bank reconciliation statement

L Deen has a debit balance of \$1 368.00 in the bank account at 1 December 2009. From the following information:

- a** complete the cash journals of L Deen
- b** complete the bank account of L Deen
- c** prepare a bank reconciliation statement as at 31 December 2009.

L Deen Cash receipts journal (extract)			
Date 2009	Rec no.	Particulars	Bank Dr \$
Dec 1	CRS	Sales	500.00
3	578	R Richards	235.50
10	CRS	Sales	475.00
15	579	B Nowland	121.00
17	CRS	Sales	575.00
27	580	P Triggell	197.80
31	581	D Harris	76.00

L Deen Cash payments journal (extract)			
Date 2009	Chq no.	Particulars	Bank Cr \$
Dec 3	051	Inventories	375.00
8	052	T Winston	456.00
14	053	Electricity	83.40
19	054	Inventories	298.05
24	055	P Colbran	163.00
27	056	Wages	250.00

Statement of account L Deen				
Date	Transaction	Debit \$	Credit \$	Balance \$
2009				
Dec 1	Opening balance			1 368.00 Cr
	Deposit		500.00	1 868.00 Cr
	Account service fee	3.75		1 864.25 Cr
	State govt debit tax	15.00		1 849.25 Cr
3	Deposit		235.50	2 084.75 Cr
	051	375.00		1 709.75 Cr
9	052	456.00		1 253.75 Cr
10	Deposit		475.00	1 728.75 Cr
15	Deposit		121.00	1 849.75 Cr
17	Deposit		575.00	2 424.75 Cr
20	054	298.05		2 126.70 Cr
27	Deposit		197.80	2 324.50 Cr
	053	83.40		2 241.10 Cr
30	Credit D Jansa		25.00	2 266.10 Cr
	056	250.00		2 016.10 Cr
	Current balance			2 016.10 Cr

★★ 3.25 Bank reconciliation statement

After receiving his bank statement, K Paddock wishes to reconcile his cash records with the bank's records. Prepare the cash journals, bank account in the ledger and a bank reconciliation statement for the month of May.

K Paddock General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amt. \$	Date	Particulars	Amt. \$
2010			2010		
				Bank a/c	
May 1	Balance b/d	472.50			

K Paddock General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Bank a/c			
May 1	Balance			472.50 Dr

K Paddock Cash receipts journal (extract)			
Date	Rec no.	Particulars	Bank Dr \$
2010			
May 1	CRS	Sales	230.00
4	1477	K Rolph	135.55
6	1478	R Carley	241.60
9	CRS	Sales	199.90
13	1479	M Tweddell	200.00
16	CRS	Sales	315.45
19	1480	B Costello	187.35
20	1481	G Thomas	250.40
25	CRS	Sales	348.20
28	1482	Commission revenue	77.10
31	1483	Office furniture	150.05

K Paddock Cash payments journal (extract)			
Date	Chq no.	Particulars	Bank Cr \$
2010			
May 3	0352	Electricity	80.00
5	0353	Inventories	350.00
7	0354	K Whittin	175.50
10	0355	Drawings	40.00
13	0356	Inventories	275.55
17	0357	S Quinn	124.90
19	0358	Interest on loan	25.60
21	0359	Postage	13.20
26	0360	Inventories	325.60
28	0361	Cost of goods sold (cartage inwards)	37.80
29	0362	Wages	500.00

Statement of account K Paddock				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
May 1	Opening balance			472.50 Cr
	Deposit		230.00	702.50 Cr
	Account service fee	3.50		699.00 Cr
	State govt debit tax	2.45		696.55 Cr
4	Deposit		135.55	832.10 Cr
6	Deposit		241.60	1 073.70 Cr
	0353	350.00		723.70 Cr
	0352	80.00		643.70 Cr
9	Deposit		199.90	843.60 Cr
10	0355	40.00		803.60 Cr
13	Deposit		200.00	1 003.60 Cr
	0356	275.55		728.05 Cr
16	Deposit		315.45	1 043.50 Cr
19	Deposit		187.35	1 230.85 Cr
	0358	25.60		1 205.25 Cr
	0357	124.90		1 080.35 Cr
20	Deposit		250.40	1 330.75 Cr
21	0359	13.20		1 317.55 Cr
25	Deposit		348.20	1 665.75 Cr
28	Deposit		77.10	1 742.85 Cr
	0360	325.60		1 417.25 Cr
	0361	37.80		1 379.45 Cr
29	0362	500.00		879.45 Cr
30	Credit M Taylor		250.00	1 129.45 Cr
	Current balance			1 129.45 Cr

★ 3.26 Categorising adjustments

In the bank reconciliation process, items that are not reconciled are recorded in either the cash journals or the bank reconciliation statement at the end of the period. From the following transactions, tick where each would be recorded:

Transactions	Cash receipts journal	Cash payments journal	Bank reconciliation statement
• Merchant service fee/POS fee			
• Errors made by the bank			
• Reversal – insufficient funds			
• Unpaid cheque fee			
• Deposits not yet credited			
• Credit – J Jones			
• Account service fee			
• Unpresented cheques			
• Credit – interest on investment			
• State government debit tax			
• Errors made by the business			
• Cheque book fee			
• Debit – interest on bank overdraft			

★★ 3.27 Bank reconciliation process



Construct a diagram that will assist you to complete the bank reconciliation process. Be sure to label your diagram, then explain how to use it.

★★ 3.28 Bank reconciliation statement

T Steinback provides you with the following information and asks that you prepare a bank reconciliation statement for the month of May 2010:

	\$
Bank account credit balance 1 May	2 843.75
Cash receipts journal total to date 31 May	31 895.00
Cash payments journal total to date 31 May	25 710.00
Credit balance as per bank statement 31 May	1 856.70
Deposits not credited 31 May	2 456.00
Unpresented cheques 31 May	978.50
Debit entries in the bank statement not accounted for in the business's records were:	
• State govt debit tax	4.05
• Cheque book	3.00

Record all cash entries directly into the bank general ledger account.

★★ 3.29 Bank balance calculations

Consider the table below and calculate the missing amounts:

	a	b	c	d	e	f
Balance as per bank statement	1 000Cr	1 000Dr	5 200Cr	750Dr	2 000Cr	300Dr
Deposits not yet credited	550	550	?	350	1 500	?
Unpresented cheques	780	780	800	?	650	150
Balance as per bank	?	?	6 000Dr	975Cr	?	230Cr

★★ 3.30 Bank reconciliation statement

J Hansen requests that you prepare a bank reconciliation statement for the month of June 2010 and provides you with the following records:

	\$
Deposits not credited	385.60
Unpresented cheques	285.20
Credit entries in the bank statement were:	
• Deposit – V Mills	200.00
• Interest on bonds	90.00
Debit entries in the bank statement were:	
• State govt debit tax	2.75
• Cheque no. 294 for 147.00 received from J Jones was not honoured for payment by the bank. It was returned marked 'insufficient funds'	
• Unpaid cheque fee	30.00
Cash receipts journal total to date as at 30 June before any adjustments are made	2 678.00
Cash payments journal total to date as at 30 June before any adjustments are made	2 816.45
Debit bank balance as at 1 June	367.80
Credit balance as per bank statement as at 30 June	239.20

Record all cash entries through the relevant cash journals.

★★★ 3.31 Bank reconciliation statement – bank error



A Armstrong of Armstrong & Associates has just received the August bank statement. As the firm's accountant, you are required to reconcile the records. Assume the bank has made any error/s found. Prepare the cash journals, bank account and a bank reconciliation statement for the month of August.

Armstrong & Associates
Bank reconciliation statement
as at 31 July 2010

	\$	\$
Debit balance as per bank statement		367.45
Add Unpresented cheque no. 720	30.00	
725	75.00	105.00
		472.45
Less Deposits not yet credited	245.00	
	350.70	595.70
Debit balance as per bank a/c		<u>\$123.25</u>

Statement of account Armstrong & Associates				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
Aug 1	Opening balance			367.45 Dr
	Deposit		245.00	122.45 Dr
	Deposit		350.70	228.25 Cr
	State govt debit tax	4.30		223.95 Cr
2	Deposit		1 500.00	1 723.95 Cr
5	Deposit		750.00	2 473.95 Cr
	725	75.00		2 398.95 Cr
	739	665.00		1 733.95 Cr
8	Deposit		3 500.00	5 233.95 Cr
12	Deposit		540.00	5 773.95 Cr
	741	987.00		4 786.95 Cr
15	Deposit		2 750.00	7 536.95 Cr
17	Deposit		1 890.00	9 426.95 Cr
	740	1 200.00		8 226.95 Cr
	742	2 430.00		5 796.95 Cr
20	Deposit		1 965.00	7 761.95 Cr
24	Deposit		2 460.00	10 221.95 Cr
	743	4 870.00		5 351.95 Cr
	744	2 610.00		2 741.95 Cr
24	745	3 615.00		873.05 Dr
26	746	1 050.00		1 923.05 Dr
27	Deposit		3 100.00	1 176.95 Cr
28	Reversal – insufficient funds	3 100.00		1 923.05 Dr
	Unpaid cheque fee	30.00		1 953.05 Dr
29	Deposit		390.00	1 563.05 Dr
30	Deposit		2 180.00	616.95 Cr
	747	329.00		287.95 Cr
	Debit cheque book	3.00		284.95 Cr
31	Credit A Goodland		60.00	344.95 Cr
	748	89.00		255.95 Cr
	Current balance			255.95 Cr

Armstrong & Associates Cash receipts journal (extract)			Armstrong & Associates Cash payments journal (extract)		
Date 2010	Bank Dr \$		Date 2010	Cheque no.	Bank Cr \$
Aug 2	1 500		Aug 4	739	665
5	750		6	740	1 200
8	3 500		10	741	987
12	540		13	742	2 430
15	2 750		17	743	4 870
17	1 890		19	744	2 610
20	1 965		23	745	3 615
24	2 460		26	746	1 050
27	3 100		28	747	329
29	390		31	748	98
30	2 180			749	453

★★★ 3.32 Bank reconciliation statement – business errors

From the following information, prepare a bank account and a bank reconciliation statement. Assume the business has made any error/s found.

T Rix Bank reconciliation statement as at 31 August 2010		
	\$	\$
Credit balance as per bank statement		2 312.00
Add Deposits not yet credited		970.00
		<u>3 282.00</u>
Less Unpresented cheque no. 456	932.00	
459	478.00	
		<u>1 410.00</u>
Debit balance as per bank a/c		<u>\$1 872.00</u>

T Rix Cash receipts journal (extract)			T Rix Cash payments journal (extract)			
Date 2010	Particulars	Bank Dr \$	Date 2010	Chq no.	Particulars	Bank Cr \$
Sep 3	K Wright	3 865.45	Sep 4	463	Inventories	3 576.80
5	Sales	5 490.00	7	464	K Weston	2 375.00
	EFTPOS sales	3 185.50	14	465	Inventories	8 974.45
11	Sales	4 836.55	17	466	N Haydon	1 964.60
	EFTPOS sales	2 784.00	28	467	Wages	9 430.95
17	W Hughes	1 390.90	29	468	Cleaning	740.20
26	Sales	2 375.60		469	F Stephens	3 619.40
	EFTPOS sales	2 060.00				
27	K Klunder	1 638.50				

Statement of account T Rix				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
Sep 1	Opening balance			2 312.00 Cr
	Deposit		970.00	3 282.00 Cr
	Merchant service charge	56.00		3 226.00 Cr
	POS fee	31.40		3 194.60 Cr
	Account service fee	15.00		3 179.60 Cr
	State govt debit tax	4.30		3 175.30 Cr
3	Deposit		3 865.45	7 040.75 Cr
5	Deposit		5 490.00	12 530.75 Cr
	EFTPOS deposit		3 185.50	15 716.25 Cr
	456	932.00		14 784.25 Cr
	463	3 576.80		11 207.45 Cr
7	Credit rent (Auth#38575)		1 240.00	12 447.45 Cr
8	464	2 365.00		10 082.45 Cr
11	Deposit		4 836.55	14 919.00 Cr
	EFTPOS		2 784.00	17 703.00 Cr
14	465	8 974.45		8 728.55 Cr
17	Deposit		1 399.00	10 127.55 Cr
26	Deposit		2 375.60	12 503.15 Cr
	EFTPOS		2 060.00	14 563.15 Cr
27	Deposit		1 638.50	16 201.65 Cr
	Debit interest on loan	83.00		16 118.65 Cr
28	467	9 430.95		6 687.70 Cr
29	469	3 619.40		3 068.30 Cr
30	Current balance			3 068.30 Cr

★★★ 3.33 Bank reconciliation statement with error

T Gertschmann received her bank statement for March 2010 and she asks you to reconcile her cash records. The following information is made available to you:

	\$
Debit balance per bank statement	2 226.70
Debit bank balance for 1 March	351.90
Cash receipts journal total to date 31 March	4 610.00
Cash payments journal total to date 31 March	4 285.00
All the unreconciled items follow:	
Unpresented cheques amounted to	368.10
Deposits not credited amounted to	3 416.70
Credits in the bank statement were:	
• Deposit – J Tynan	468.00
• Interest on investment	50.00
Debits in the bank statement were:	
• Account service fee	4.00
• State government debit tax	2.50
• A cheque received from H Harold for \$390.50 which was deposited has been returned by the bank marked 'insufficient funds'	
• Unpaid cheque fee	30.00
• Gertschmann found that cheque no. 387 for \$139.50 drawn to pay for cleaning was incorrectly recorded in her records as \$193.50	

3.34 Bank reconciliation statement with errors

Ben Siacca received his bank statement for April 2010 and he asks you to reconcile his cash records. The following information is made available to you:

The reconciled bank balance at the end of March was \$1 088 credit. Cheques issued in March, but not yet debited by the bank, were:

Cheque no. 655	\$400
659	\$365
660	\$1 269

Deposits made by the business in March, but not credited by the bank, amounted to \$410. In March, the bank had incorrectly debited the account for \$1 495 for cheque 654, instead of \$1 459.

The cash entries recorded by the business for the month of April were as follows:

Cash receipts journal				Cash payments journal (extract)			
Date 2010	Rec no.	Particulars	Amount \$	Date 2010	Chq no.	Particulars	Amount \$
Apr 1	CRS	Sales	3 400.00	Apr 1	662	Wages	2 200.00
3	34	H Gourley	2 100.00	3	663	Inventories	460.00
5	35	Equipment	2 000	5	664	Postage	110.00
	CRS	Sales	600	8	665	Vehicle repairs	2 200.00
9	CRS	Sales	900.00	11	666	T Beckers	800.00
12	36	Commission	330.00	15	667	Wages	2 200.00
14	CRS	EFTPOS sales	3 200.00	20	668	Insurance	1 200.00
18	37	T Copland	830	24	669	S Wooley	210.00
	CRS	Sales	2 700	28	670	Inventories	210.00
22	38	E O'Dell	300.00	29	671	Wages	2 200.00
25	39	B Bromley	440		672	Machinery	7 600.00
	CRS	Sales	1 800				
28	CRS	Sales	1 800.00				

Statement of account with Newtown Bank, Brisbane Qld 4000 Ben Siacca, Account no. 456 999 023 452

Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
Apr 1	Opening balance			500.00 Cr
	Credit interest		5	505.00 Cr
	Deposit		410	915.00 Cr
2	655	400		515.00 Cr
	Deposit		3 400	3 915.00 Cr
	Account service fee	15		3 900.00 Cr
	March error adjustment		36	3 936.00 Cr
4	Deposit		2 100	6 036.00 Cr
	659	365		5 671.00 Cr
5	Deposit		2 660	8 331.00 Cr
	662	2 200		6 131.00 Cr
	Direct deposit – C Arnold		1 800	7 931.00 Cr
	663	460		7 471.00 Cr
	664	110		7 361.00 Cr
9	Deposit		800	8 161.00 Cr
12	Deposit		330	8 491.00 Cr
14	EFTPOS deposit		3 200	11 691.00 Cr
18	Deposit		3 530	15 221.00 Cr
	667	2 200		13 021.00 Cr
	H Gourley – dish cheque	2 100		10 921.00 Cr
	Dishon. chq fee	25		10 896.00 Cr
22	Deposit		300	11 196.00 Cr
25	Deposit		2 240	13 436.00 Cr
	669	2 200		11 236.00 Cr
	Current balance			11 236.00 Cr

Additional information:

Any errors found in the cash receipts journal are assumed to have been made by the business. Any errors found in the cash payments journal are assumed to have been made by the bank.

You are required to complete the bank reconciliation for the month of April 2010.

3.35 Bank reconciliation statement with errors

S Rathbone has presented you with her partially completed cash journals for November 2010.

You are required to:

- a** Complete the cash journal entries only.
- b** Show the balanced bank account at 30 November 2010.
- c** Prepare the bank reconciliation statement for November 2010.

Cash receipts journal				Cash payments journal (extract)			
Date 2010	Rec no.	Particulars	Amount \$	Date 2010	Chq no.	Particulars	Amount \$
Nov 1	401	Capital	6 000.00	Nov 2	17	Inventories	2 200.00
3	402	M Bellas	900.00	3	18	C Potter	650.00
7	403	J Collins	550	5	19	M Riley	800.00
	CRS	Sales	2 100	8	20	Inventories	960.00
10	CRS	Sales	2 900.00	11	21	E Dawson	770.00
14	404	Service fees	640	14	22	Wages	2 900.00
	CRS	EFTPOS sales	150.00	21	23	Furniture	800.00
	CRS	Sales	1 560	23	24	Drawings	300.00
20	405	Equipment	500.00	25		Vehicles	3 500.00
22	406	Service fees	270.00				
23	CRS	Sales	3 300.00				
24	CRS	Sales	1 900.00				

Transactions not yet entered:

Nov 25	EFTPOS sales \$1 540
	Cash sales \$660
	Sales on credit to K Rooney \$220
	Paid David Ward \$550 (CH26) in settlement of account
Nov 27	Bought equipment on credit for \$2 320 from Peter Munroe & Co. Paid \$400 deposit (CH27)
	Paid wages \$900 (CH28)
	Sold goods for cash \$3 430
Nov 28	N. Hayward settled her account in full \$600 (R407)
	Cash sales \$4 070
	Bought stationery \$110 (CH29)

Statement of account with Newtown Bank, Brisbane Qld 4000 S Rathbone, Account no. 8989232930				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
Nov 1	Opening balance			1 100.00 Dr
	Account service fee	10		1 110.00 Dr
	Deposit		2 150	1 040.00 Cr
	Error adjustment		15	1 055.00 Cr
	Deposit		6 000	7 055.00 Cr
	14	495		6 560.00 Cr
	15	2 610		3 950.00 Cr
4	Deposit		900	4 850.00 Cr
	17	2 200		2 650.00 Cr
7	Deposit		2 560	5 210.00 Cr
	18	650		4 560.00 Cr
	Direct deposit – J Seeto		270	4 830.00 Cr
9	20	960		3 870.00 Cr
	19	800		3 070.00 Cr
11	Deposit		2 900	5 970.00 Cr
14	Deposit		2 190	8 160.00 Cr
	EFTPOS deposit		150	8 310.00 Cr
20	Deposit		500	8 810.00 Cr
	22	900		7 910.00 Cr
	M Bellas – dishon. cheque	900		7 010.00 Cr
	Dishon. chq fee	15		6 995.00 Cr
22	Deposit		270	7 265.00 Cr
23	Deposit		3 300	10 565.00 Cr
24	Deposit		1 900	12 465.00 Cr
25	EFTPOS deposit		1 540	14 005.00 Cr
	Deposit		660	14 665.00 Cr
	23	800		13 865.00 Cr
	24	300		13 565.00 Cr
27	Deposit		3 430	16 995.00 Cr
	Current balance			16 995.00 Cr

Additional information:

Received notification from the bank that the deposit on 7 November was incorrectly entered as \$2 560, instead of \$2 650. This will be adjusted on the next statement. Cheque no. 22 was incorrectly recorded in our records. The bank statement amount is correct.

Outstanding items from October 2010:

Cheque no. 17	\$495
19	\$2 610
20	\$1 320

Deposit for \$2 150.

Bank error for \$15 to be credited to our account.

The reconciled bank balance from October was \$3 360 credit.

★★★ 3.36 Bank reconciliation statement with errors

Alexandra Petavakis has employed you as her accountant from 1 August and informs you that your first task is to prepare a bank reconciliation statement for the month of July. GST does not apply in this business. During July, Alexandra recorded the following transactions:

2010

Jul	2	Cash sales – \$500
	3	Paid K Bignell \$450 to settle the account in full – cheque no. 331
		EFTPOS sales – \$300

- 7 Alexandra withdrew cash for her own use – cheque no. 332, \$120
- 11 Purchased goods on credit from A Luxford – \$987
Bought new equipment for cash – cheque no. 333, \$544
- 12 Sold goods on credit to C McElhinney – \$219
Received cash from K Oldfield – \$700
- 15 Cash purchases – cheque no. 334, \$235
- 17 Cash sales \$590
Sold goods on credit to C Wei – \$326
EFTPOS sales – \$470
- 19 Sold goods on credit to R Logan – \$400
- 22 Cash sales – \$670
- 24 Paid wages – cheque no. 335, \$500
- 28 C Robins paid \$250
Cash sales – \$100
Cash refund for goods returned – cheque no. 336, \$38.95
- 31 Cost of goods sold for July is \$2 000

Alexandra also provides you with the following four documents:

Alexandra Petavrakis Bank reconciliation statement as at 30 June 2010			
Credit balance as per bank statement		2 567	
Add Deposits not yet credited		33	
		<u>2 600</u>	
Less Unpresented cheque no. 322	300		
	329	200	
	330	100	600
Debit balance as per bank a/c		<u>\$2 000</u>	

28.7.10
The cash sales entry
in our cash receipts on
17 July 2010 is in error.
Alexandra

Bank of Manly Bank statement				
Account Name: A PETAVRAKIS Account no.: 4987 7492				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
Jul 1	Balance			2 567.00 Cr
	C/c		33	2 600.00 Cr
2	C/c		500	3 100.00 Cr
3	EFTPOS deposit		300	3 400.00 Cr
6	330	100		3 300.00 Cr
10	332	220		3 080.00 Cr
12	C/c		700	3 780.00 Cr
	331	450		3 330.00 Cr
16	329	200		3 130.00 Cr
	Bank fee	3		3 127.00 Cr
17	C/c		390	3 517.00 Cr
	EFTPOS deposit		470	3 987.00 Cr
22	C/c		670	4 657.00 Cr
25	335	500		4 157.00 Cr
28	Reversal – insufficient funds (K Oldfield)	700		3 457.00 Cr
	Unpaid cheque fee	25		3 432.00 Cr
	EFTPOS fee	10		3 422.00 Cr
29	Bank interest		24	3 446.00 Cr

**BANK OF MANLY
WYNNUM BRANCH
Moreton Bay Road
Wynnum QLD 4178**

4 August 2010

Ms A Petavakis
Shop 33, Wynnum Plaza
Manly Road
WYNNUM QLD 4178

Dear Ms Petavakis

I regret to inform you that we have detected an error in your bank statement dated 29 July 2010.

Cheque number 332 is recorded in your bank statement as \$220.00. This cheque has been amended in our records to the correct figure of \$120.00. We apologise for any inconvenience caused and assure you of our best attention at all times.

Yours faithfully

Jack Stathis

Jack Stathis
Manager

You are required to prepare:

- a** cash receipts and payments journals for the month of July 2010
- b** bank account balanced as at 31 July 2010
- c** bank reconciliation statement as at 31 July 2010.

★★★ 3.37 **Bank reconciliation statement – two consecutive periods**

Prepare the cash journals, bank account and bank reconciliation statement for the months of June and July 2010 from the following records. Any errors are assumed to have been made by the business.

**Paul Bruenello & Associates
General ledger (extract) – T-format**

Dr				Cr	
Date	Particulars	Amt.	Date	Particulars	Amt.
		\$			\$
2010			2010		
				Bank a/c	
Jun 1	Balance b/d	2 000			

**Paul Bruenello & Associates
General ledger (extract) – columnar format**

Date	Particulars	Debit	Credit	Balance
		\$	\$	\$
2010				
	Bank a/c			
Jun 1	Balance			2 000 Dr

**Paul Bruenello & Associates
Cash receipts journal (extract)**

Date	Rec no.	Particulars	Bank
2010			Dr
			\$
June 1	399	Fees revenue	400.00
9	400	K Green	200.00
11	CRS	Sales	300.10
23	401	S Kerston	200.00
29	CRS	Sales	205.00

**Paul Bruenello & Associates
Cash payments journal (extract)**

Date	Chq no.	Particulars	Bank
2010			Cr
			\$
June 1	300	Wages	600.00
9	301	Telephone expenses	700.00
17	302	K Redding	800.00
24	303	Inventories	155.00
27	304	Inventories	240.00

Statement of account Paul Bruenello & Associates				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
June 1	Opening balance			2 000.00 Cr
	Deposit		400.00	2 400.00 Cr
9	Deposit		200.00	2 600.00 Cr
11	Deposit		300.10	2 900.10 Cr
13	300	600.00		2 300.10 Cr
	301	700.00		1 600.10 Cr
17	Deposit – K Smith		100.50	1 700.60 Cr
23	Deposit		200.00	1 900.60 Cr
28	Interest	150.00		1 750.60 Cr
	Debit cheque book	30.00		1 720.60 Cr
	Current balance			1 720.60 Cr

Paul Bruenello & Associates
Cash receipts journal (extract)

Date 2010	Rec no.	Particulars	Bank Dr \$
July 3	402	P Menton	185.00
7	403	W Wyatt	310.00
20	CRS	Sales	254.00
22	404	P Menton	250.00
30	CRS	Fees revenue	250.00
31	CRS	Sales	800.00

Paul Bruenello & Associates
Cash payments journal (extract)

Date 2010	Chq no.	Particulars	Bank Cr \$
July 2	305	Rent expense	1 000.00
4	306	O Quinton	163.00
9	307	Inventories	177.00
18	308	Wages	500.00
25	309	Electricity expense	150.40
30	310	R Ray	70.00

Statement of account Paul Bruenello & Associates				
Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
July 1	Opening balance			1 720.60 Cr
	Deposit		250.00	1 970.60 Cr
3	Deposit		185.00	2 155.60 Cr
	302	800.00		1 355.60 Cr
5	305	1 000.00		355.60 Cr
7	Deposit		310.00	655.60 Cr
10	306	163.00		502.60 Cr
	307	177.00		325.60 Cr
20	Deposit		245.00	570.60 Cr
21	308	500.00		70.60 Cr
	303	150.00		79.40 Dr
	State govt debit tax	10.00		89.40 Dr
22	Deposit		300.00	210.60 Cr
	Credit bank interest		35.00	245.60 Cr
24	Reversal – insufficient funds	300.00		54.40 Dr
30	Deposit		250.00	195.60 Cr
	Account service fee	150.00		45.60 Cr
	Merchant service charge	60.00		14.40 Dr
	Current balance			14.40 Dr

★★ 3.38 **Bank reconciliation statement**



Refer to example 6 (Bowtell Boat Supplies) on pages 228–30 and prepare a letter to the bank notifying it of the error in its bank statement. You are to provide any additional information you think would be required.

★★ 3.39 Bank records versus business's records



Write a memo to your superior explaining the differences that can arise between the business's bank account records in the general ledger and the bank's records in the bank statement.

★★ 3.40 Bank reconciliation statement



If the accounts clerk entered four cheques worth \$1 289 in total into the month of April 2009 instead of March 2009, how would this affect the bank reconciliation process? Structure your answer into well-formed paragraphs.

★★ 3.41 Bank reconciliation – computerised accounting

On 1 May 2009, Adam Hughes commenced his business as a management consultant. He earns his revenue through being contracted by various businesses to help them find more efficient methods of operating.

- a For the month of May, you are required to:
 - i record Adam's transactions for the month using a computerised accounting package
 - ii compare Adam's record of cash received and paid with the May bank statement and make any adjustments to Adam's cash records
 - iii print a copy of cash received and paid for in the month
 - iv reconcile the cash records with the bank statement balance (if software has this facility) and print a report
 - v manually prepare a bank reconciliation statement for the month.
- b For the month of June, you are required to:
 - i record Adam's transactions for the month using a computerised accounting package
 - ii compare Adam's record of cash received and paid with the June bank statement and make any adjustments to Adam's cash records
 - iii print a copy of cash received and paid for in the month
 - iv reconcile the cash records with the bank statement balance (if software has this facility) and print a report
 - v manually prepare a bank reconciliation statement for the month.

Any errors are considered non-bank errors and are corrected in Adam's accounting records. All values include 10% GST except where indicated.

Transactions for May were:

2009

May	1	Adam deposited \$20 000 cash as capital (no GST)
	4	Paid rent in advance for May, \$400 to J Lawrie (cheque no. 1)
	6	Consultancy fees revenue received – \$2 000
	10	Paid for printing of office stationery – \$500
	15	Paid for 12 months' insurance from AAA Insurances Ltd – \$1 200
	17	Organised a loan from CCC Banking Corp. for \$34 000 and received the cash today
	20	Paid cheque for \$36 000 to Sunnybank Motors for new vehicle
	24	Received consultancy fees revenue – \$5 000
	27	Postage – paid cash \$45
	29	Purchased office equipment on credit from Big Name Stores valued at \$5 000 and paid \$500 deposit
	30	Received consultancy fees revenue – \$1 100
	31	Withdrew cash for personal use – \$400 (no GST)

The following bank statement was received on 2 June 2009:

CCC BANKING CORP Statement for Adam Hughes				
Month: May Account: 2-490-9843				
Date	Transaction	Debit \$	Credit \$	Balance \$
2009				
May 1	Deposit		20 000.00	20 000.00 Cr
3	Debit cheque book	5.00		19 995.00 Cr
6	Deposit		2 000.00	21 995.00 Cr
17	Deposit		34 000.00	55 995.00 Cr
	00001	400.00		55 595.00 Cr
21	00004	36 000.00		19 595.00 Cr
24	Deposit		5 000.00	24 595.00 Cr
30	State govt debit tax	9.85		24 585.15 Cr
	Account service fee	2.15		24 583.00 Cr
	00006	500.00		24 083.00 Cr
31	00007	400.00		23 683.00 Cr
	00003	1 200.00		22 483.00 Cr
	Current balance			22 483.00 Cr

Transactions for June 2009 were:

June 3	Paid rent in advance for June to J Lawrie – \$400
4	Consultancy fees revenue received – \$1 000
5	Purchased an office computer on credit from Southside Office Products for \$3 000
9	Purchased office stationery and supplies for cash – \$15
11	Consultancy fees revenue received – \$1 500
12	Repayment to bank for loan – \$400 (no GST)
13	Paid cash for repairs to office equipment – \$75
15	Consultancy fees revenue received – \$2 000
19	Paid Energex \$250 for electricity
20	Adam wrote a cheque for \$500 cash for personal expenses
24	Consultancy fees revenue received – \$1 000
27	Courier expenses for delivery of documents – \$40
29	Postage expenses of \$120 were paid to Australia Post
30	Paid Southside Office Products \$2 850

The following bank statement was received on 3 July 2009:

CCC BANKING CORP Statement for Adam Hughes				
Month: June Account: 2-490-9843				
Date	Transaction	Debit \$	Credit \$	Balance \$
2009				
June 1	Opening balance			22 483.00 Cr
4	Deposit		1 000.00	23 484.00 Cr
	Deposit		1 000.00	24 484.00 Cr
12	00009	15.00		24 468.00 Cr
13	00008	400.00		24 068.00 Cr
	00010	400.00		23 668.00 Cr
15	Deposit		2 000.00	25 668.00 Cr
20	00012	250.00		25 418.00 Cr
	00013	500.00		24 918.00 Cr
22	00011	75.00		24 843.00 Cr
24	Deposit		1 000.00	25 843.00 Cr
30	State govt debit tax	6.55		25 836.45 Cr
	Account service fee	3.15		25 883.30 Cr
	Current balance			25 883.30 Cr

★★★ 3.42 Manual versus computerised applications

- a** Complete a manual bank reconciliation statement to exercise 3.41 incorporating specialised cash journals.
- b** Compare your answer to part **a** with the results from the computerised application in exercise 3.41. Note any similarities and differences in a table format.

★★★ 3.43 Decision-making – Price Attack

A financial adviser has recently told a Price Attack retailer that it need not bother completing a bank reconciliation. The reasons given were that, in time, all cheques will be presented and all deposits will appear on the bank statement. In addition, any errors that appear are usually small, and tracking these costs is not effective. In addition, if a bank error occurs, Price Attack cannot change the bank records, and the business's records are correct anyway. Therefore, the financial adviser recommended that the practice of completing bank reconciliation statements be discontinued. Price Attack has decided to seek a second opinion.

You have been selected to give this second opinion. You have been appointed to present a detailed report commenting upon the advice that the financial adviser gave. You must evaluate any other relevant issues that apply to this situation and give reasons for your recommendations.

RC2

Subsidiary ledgers

Accounts receivable and accounts payable subsidiary ledgers

- Purpose of subsidiary ledgers
- Accounts receivable subsidiary ledger
- Accounts payable subsidiary ledger

Unpaid debts

- Options for unpaid debts
- Interest
- Bad debts
- Doubtful debts
- Recovery of bad debts
- Adjusting the provision for doubtful debts
- Factoring

Part 1 – Accounts receivable and accounts payable subsidiary ledgers

Already know

- How to account for transactions in the accounts receivable and accounts payable ledger accounts

Need to know

- Accounts receivable and accounts payable:
 - application of subsidiary ledgers and control accounts to accounts receivable and accounts payable
 - consideration of specialised journals (sales, purchases) using the perpetual system and recording GST (returns journals are not required)
 - preparation of accounts receivable and accounts payable control accounts and subsidiary ledgers

Using this knowledge

- *Provides information for decision-making* on the level and accuracy of accounts receivable and accounts payable values
- *Assists in discharging accountability* by ensuring additional control over the recording of credit transactions through the division of duties

ACCOUNTING VOCABULARY

Accounts payable subsidiary ledger	Purchases journal
Accounts receivable subsidiary ledger	Sales journal
Control account	Subsidiary ledger

Learning objectives

After completing this section, you should be able to:

- 1 understand the purpose of subsidiary ledgers
- 2 complete an accounts receivable subsidiary ledger and control account
- 3 complete an accounts payable subsidiary ledger and control account.

Purpose of subsidiary ledgers

Learning objective 1

As the number of accounts receivable and accounts payable increase, the volume of transactions recorded in the general ledger can become awkward. The increase in transactions results in excessive detail being present in the general ledger. Such a level of detail is usually not required in the general ledger and is one reason why **subsidiary ledgers** are introduced into the accounting system.



Subsidiary ledgers are additional ledgers maintained for the specific purpose of holding all individual accounts receivable or accounts payable accounts.

Subsidiary ledgers are often labelled ‘specialised ledgers’.

One replacement **control account** for each subsidiary ledger is required in the general ledger. One control account replaces all individual accounts receivable accounts, while another replaces all individual accounts payable accounts.



Control accounts are general ledger accounts that summarise like transactions in individual subsidiary ledger accounts.

The use of subsidiary ledgers is common within a computerised accounting system. The effect of the introduction of accounts receivable and accounts payable subsidiary ledgers is illustrated graphically in [4.1].

[4.1]

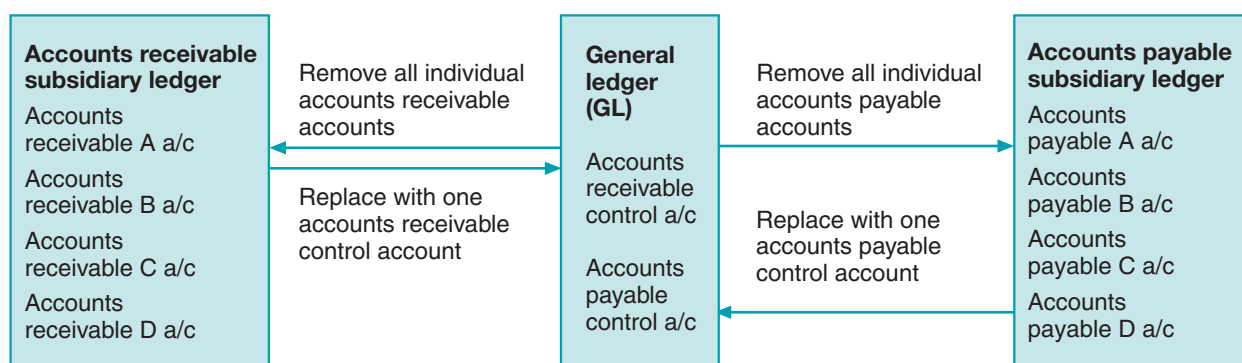


Figure [4.1] illustrates the exclusion of the individual accounts for accounts receivable and accounts payable from the general ledger, and the inclusion of only two control accounts in the general ledger to replace the individual accounts. If detail is removed from the general ledger, then the double entry is affected. Therefore, a summary account (control account) to replace the removed detailed accounts is required. How this is achieved is the topic of this section.

Accounts receivable subsidiary ledger

Learning objective 2

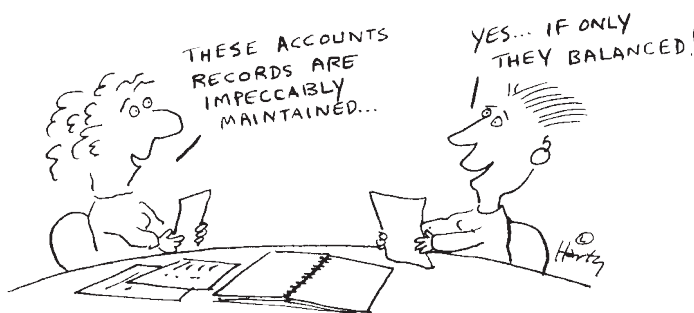
When introducing an accounts receivable subsidiary ledger, the introduction of a **control account** is also necessary.



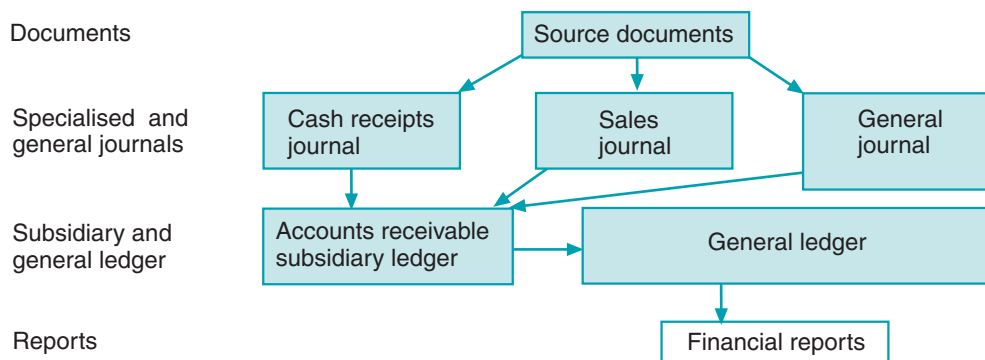
The **accounts receivable subsidiary ledger** records all individual accounts receivable accounts.

The **accounts receivable control account** summarises all information pertaining to accounts receivables. It is an asset account.

With the introduction of the accounts receivable subsidiary ledger and the accounts receivable control account, some adjustments to the process used to date need to be made. These adjustments include using additional journals for ease of posting totals to the general ledger, as well as the introduction of the subsidiary ledger. Figure [4.2] illustrates the flow of information in the accounting process with the addition of an accounts receivable subsidiary ledger.



[4.2]

Tracing *only* the accounts receivable accounts

You are already familiar with the specialised journal for cash received, the cash receipts journal. With the introduction of the accounts receivable subsidiary ledger, another specialised journal – a sales journal – is required. This journal will assist the processing of accounts receivable transactions and will be incorporated into the accounting process.

The sale of assets (other than inventory) on credit is still processed through the general journal.

Sales journal

A business may carry out a large volume of credit sales transactions each day, resulting in hundreds of invoices being generated. A specialised journal – the **credit sales journal** or just 'sales journal' – will facilitate the recording of these inventory transactions sold on credit. This specialised journal assists with gathering like items together and provides a total value of credit sale transactions for posting to the accounts receivable control account in the general ledger. These credit sales of inventories, which previously were entered into the general journal, will now be entered into the sales journal instead.



The **sales journal** records all sales of inventories made on credit.



Figure [4.3] compares how the *credit sales* entries have appeared in the general journal with how they will appear when entered directly into the sales journal.

[4.3]

Su Kim Ling General journal				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
Nov 1	Inventories	Dr	4 000	
	Bank	Dr	5 000	
	Capital	Cr		9 000
	(Owner deposits inventories and cash as capital)			
2	Accounts receivable control – J Richardson	Dr	352	
	GST clearing	Cr		32
	Sales	Cr		320
	(Credit sales I3254)			
3	Accounts receivable control – T Cassell	Dr	605	
	GST clearing	Cr		55
	Sales	Cr		550
	(Credit sales I3255)			
14	Accounts receivable control – J Tennant	Dr	682	
	GST clearing	Cr		62
	Sales	Cr		620
	(Credit sales I3256)			
	Accounts receivable control – J Richardson	Dr	250	
	Sales	Cr		250
	(Credit sales I3257 GST-free)			
21	Accounts receivable control – J Tennant	Dr	154	
	GST clearing	Cr		14
	Sales	Cr		140
	(Credit sales I3258)			
23	Accounts receivable control – R Day	Dr	132	
	GST clearing	Cr		12
	Sales	Cr		120
	(Credit sales I3259)			
30	Cost of goods sold	Dr	780	
	Inventories	Cr		780
	(Total cost of sales in November)			

As indicated, credit sales of inventory would now be recorded in the sales journal instead of the general journal.

For simplicity it is assumed that the cost price of goods sold is recorded in the general journal on a monthly basis. An alternative method is to add another two columns to the sales journal and record COGS and inventories at cost for each transaction.

Su Kim Ling Sales journal							
Date	Invoice no.	Accounts receivable	Account no.	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
2010							
Nov 2	3254	J Richardson	3104.3		320	32	352
3	3255	T Cassell	3104.1		550	55	605
14	3256	J Tennant	3104.4		620	62	682
		J Richardson	3104.3		250		250
21	3258	J Tennant	3104.4		140	14	154
23	3259	R Day	3104.2		120	12	132
30					\$2 000	\$175	\$2 175

From the sales journal in [4.4], the total of each column is posted to the general ledger. Each accounts receivable transaction is also posted to the subsidiary ledger. At the end of the period, a schedule of accounts receivable is prepared from the subsidiary ledger. The total of this schedule is checked against the balance of the accounts receivable control account in the general ledger. This is illustrated in [4.5].

[4.5]

Prepared from the subsidiary ledger

Su Kim Ling Schedule of accounts receivable as at 30 November 2010	
T Cassells	605
R Day	132
J Richardson	627
J Tennant	836
Balance as per control account	<u>\$2 200</u>

Prepared from the general ledger

Su Kim Ling Trial balance as at 30 November 2010 (extract)		
	Debit	Credit
	\$	\$
Sales		2 000
Accounts receivable control	2 200	
GST clearing		200
	<u>\$2 200</u>	<u>\$2 200</u>

Review & practice

1

Use the sales journal and ledgers of Su Kim Ling in [4.4] to answer the following questions.

- a **What** were the total credit sales of inventories for November?
- b **How** much does J Tennant owe Su Kim Ling?
- c On 14 November 2010, Su Kim Ling sold a motor vehicle on credit to T Cassell for \$23 000. Why is this transaction not entered into the sales journal of Su Kim Ling?
- d **What** transaction took place on 23 November 2010?
- e **What** type of account is an 'accounts receivable control account'?
- f **When** would it be appropriate to introduce an accounts receivable subsidiary ledger into an accounting system?

► Exercises 4.1 to 4.4, pages 293–4

All journals for accounts receivable

The figures on pages 266 and 267 contain a worked exercise with the sales, cash receipts and general journals being posted to the subsidiary ledger and the general ledger. This process is illustrated using T-form accounts [4.6a] and columnar ledger accounts [4.6b].

[4.6a]

Su Kim Ling Accounts receivable subsidiary ledger					
Dr	Part.	Amt.	Date	Part.	Cr
Date		\$			\$
2010			2010		
3104.1			T Cassell		
Nov 3	Sales & GST	605	Nov 10	Bank	190
3104.2			R Day		
Nov 23	Sales & GST	132			
3104.3			J Richardson		
Nov 2	Sales & GST	352	Nov 5	Bank	165
Nov 14	Sales & GST	275			
3104.4			J Tennant		
Nov 14	Sales & GST	682			
Nov 21	Sales & GST	154			

All items in this subsidiary ledger are entered in date order.

Posting to T-format ledger accounts

Su Kim Ling Cash receipts journal									
Date	Rec no.	Particulars	Post ref	Sales \$	Other \$	Accounts receivable control \$	GST clearing \$	Bank \$	
2010				Cr	Cr	Cr	Cr	Dr	
Nov 1	230	Capital	5101		5 000				
	231	Rent revenue	1106		400				
	CHS	Sales		460			40	5 946	
5	232	J Richardson	3104.3			165	46	165	
10	232	Commission revenue	1103		60		6		
	233	T Cassell	3104.1			190			
15	233	Sales EFTPOS		300			30	256	
	234	Rent revenue	1106		330		33	330	
30				\$760	\$5 790	\$355	\$155	\$7 060	
				(1101)	(X)	(3104)	(4102)		
									(3103)

Su Kim Ling Sales journal									
Date	Invoice no.	Accounts receivable	Post ref	Sales \$	GST clearing \$	Accounts receivable control \$			
2010				Cr	Cr	Dr			
Nov 2	3254	J Richardson	3104.3	320		352			
3	3255	T Cassell	3104.1	550		605			
14	3256	J Tennant	3104.4	620		682			
	3257	J Richardson	3104.3	250		275			
21	3258	J Tennant	3104.4	140		154			
23	3259	R Day	3104.2	120		132			
30				\$2 000	\$200	\$2 200			
				(1101)	(4102)				(3104)

Su Kim Ling General journal					
Date	Particulars	Account no.	Post ref	Debit \$	Credit \$
2010					
Nov 1	Inventories	Dr 3105	✓	4 000	
	Capital	Cr 5101	✓		4 000
	(Owner brought inventories to the business)				
30	Cost of goods sold	Dr 2101	✓	780	
	Inventories	Cr 3105	✓		780
	(Purchase value of goods sold)				

Su Kim Ling General ledger									
Dr	Part.	Amt.	Date	Part.	Amt.	Cr			
Date		\$			\$				
2010			2010						
1101			Sales a/c						
			Nov 30	Bank	760				
				Accounts receivable control	2 000				
1103			Commission revenue a/c						
			Nov 10	Bank	60				
1106			Rent a/c						
			Nov 1	Bank	400				
			15	Bank	330				
2101			Cost of goods sold a/c						
Nov 30	Inventories	780							
3103			Bank a/c						
Nov 30	Sundry receipts	7 060							
3104			Accounts receivable control a/c						
Nov 30	Sales & GST	2 200	Nov 30	Bank	355				
3105			Inventories a/c						
Nov 1	Capital	4 000	Nov 30	Cost of goods sold	780				
4102			GST clearing a/c						
			Nov 30	Bank	155				
				Accounts receivable control	200				
5101			Capital a/c						
Nov 1	Bank	5 000							
	Inventories	4 000							

[4.6b]

Su Kim Ling Accounts receivable subsidiary ledger					
Date	Particulars	Debit	Credit	Balance	
		\$	\$	\$	
2010					
3104.1 T Cassell					
Nov 3	Sales & GST	605		605 Dr	
Nov 10	Bank		190	415 Dr	
3104.2 R Day					
Nov 23	Sales & GST	132		132 Dr	
3104.3 J Richardson					
Nov 2	Sales & GST	352		352 Dr	
Nov 5	Bank		165	187 Dr	
Nov 14	Sales	275		462 Dr	
3104.4 J Tennant					
Nov 14	Sales & GST	682		682 Dr	
Nov 21	Sales & GST	154		836 Dr	

All items in this subsidiary ledger are entered in date order.

Posting to columnar format ledger accounts

Su Kim Ling Cash receipts journal									
Date	Rec no.	Particulars	Post ref	Sales \$	Other \$	Accounts receivable control \$	GST clearing \$	Bank \$	
2010				Cr	Cr	Cr	Cr	Dr	
Nov 1	230	Capital	5101		5 000				
	231	Rent revenue	1106		400				
	CFS	Sales		460			40	5 946	
5	CFS	J Richardson	3104.3			165		165	
10	232	Commission revenue	1103		60		6		
	233	T Cassell	3104.1			190		256	
15	CFS	Sales EFTPOS		300			30	330	
	234	Rent revenue	1106		330		33	363	
30				\$760	\$5 790	\$355	\$155	\$7 060	
				(1101)	(X)	(3104)	(4102)		(3103)

Su Kim Ling Sales journal									
Date	Invoice no.	Accounts receivable	Post ref	Sales \$	GST clearing \$	Accounts receivable control \$			
2010				Cr	Cr	Dr			
Nov 2	3254	J Richardson	3104.3	320	32	352			
3	3255	T Cassell	3104.1	550	55	605			
14	3256	J Tennant	3104.4	620	62	682			
	3257	J Richardson	3104.3	250	25	275			
21	3258	J Tennant	3104.4	140	14	154			
23	3259	R Day	3104.2	120	12	132			
30				\$2 000	\$200	\$2 200			
				(1101)	(4102)	(3104)			

Su Kim Ling General journal									
Date	Particulars	Account no.	Post ref	Debit \$	Credit \$				
2010									
Nov 1	Inventories	3105	✓	4 000					
	Capital	5101	✓		4 000				
	(Owner contributed inventories)								
30	Cost of goods sold	2101	✓	780					
	Inventories	3105	✓		780				
	(Total cost of sales – November)								

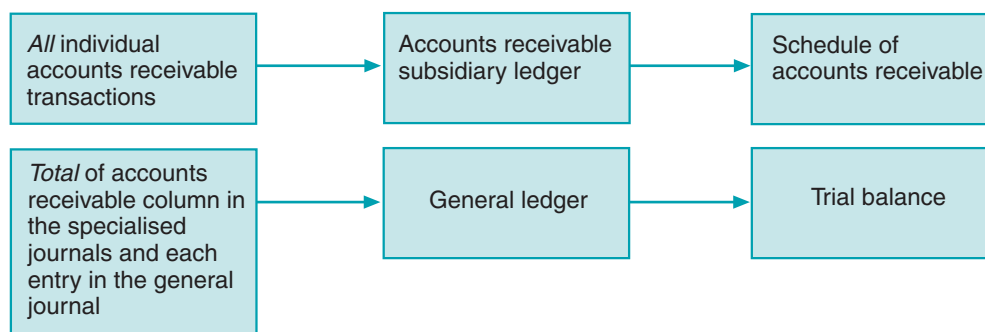
Su Kim Ling General ledger					
Date	Particulars	Debit \$	Credit \$	Balance	
2010					
1101 Sales a/c					
Nov 30	Bank		760	760 Cr	
	Accounts rec. control		2 000	2 760 Cr	
1103 Commission revenue a/c					
Nov 10	Bank		60	60 Cr	
1106 Rent revenue					
Nov 1	Bank		400	400 Cr	
Nov 15	Bank		330	730 Cr	
2101 Cost of goods sold a/c					
Nov 30	Inventories	780		780 Dr	
3103 Bank a/c					
Nov 30	Receipts	7 060		7 060 Dr	
3104 Accounts receivable control a/c					
Nov 30	Sales & GST	2 200		2 200 Dr	
	Bank		355	1 845 Dr	
3105 Inventories a/c					
Nov 1	Capital	4 000		4 000 Dr	
Nov 30	Cost of goods sold		780	3 220 Cr	
4102 GST clearing a/c					
Nov 30	Bank		155	155 Cr	
	Sales		200	355 Cr	
5101 Capital a/c					
Nov 1	Bank		5 000	5 000 Cr	
	Inventories		4 000	9 000 Cr	

✓ Helpful hints

- The *total* of the accounts receivable column in the two specialised journals – sales and cash receipts – is posted to the general ledger.
- Each accounts receivable transaction is posted to the relevant *individual* account in the subsidiary ledger.
- Each accounts receivable entry in the general journal is posted to the control account in the general ledger and to the relevant individual account in the subsidiary ledger.
- All entries made are in total in the control account as well as duplicated in detail in the subsidiary ledger accounts.

The posting process is illustrated in [4.7].

[4.7]



The schedule of accounts receivable is prepared from the accounts receivable subsidiary ledger. The trial balance is prepared from the general ledger.

Su Kim Ling

Schedule of accounts receivable as at 30 November 2010

T Cassell	415
R Day	132
J Richardson	462
J Tennant	836
Balance as per control account	<u>\$1 845</u>

Su Kim Ling

Trial balance as at 30 November 2010 (extract)

	Debit \$	Credit \$
Sales		2 760
Commission revenue		60
Rent revenue		730
Cost of goods sold	780	
Bank	7 060	
Accounts receivable control	1 845	
Inventories	3 220	
GST clearing		355
Capital		9 000
	<u>\$12 905</u>	<u>\$12 905</u>

Review & practice 2

- a** Complete the following journals and post the information to the accounts receivable subsidiary ledger and the general ledger.

Lions Fun Park
Cash receipts journal

Date 2010	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable control Cr \$	GST clearing Cr \$	Bank Dr \$
Sept 1	623	Interest revenue			1 600			
	CRS	Sales		880			88	2 568
5	CRS	L Lawrence	3104.3			559		559
10	624	Rent revenue			750		75	
	625	H James	3104.2			821		1 646
15	CRS	Sales EFT		1 590			159	1 749
	626	Furniture			820		82	902
30								

Lions Fun Park
Sales journal

Date 2010	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Sept 2	259	H James	3104.2	420	42	462
3	260	L Lawrence	3104.3	500	50	550
14	261	J Morrisson	3104.4	2 560	256	2 816
	262	H James	3104.2	350	35	385
21	263	G Hillary	3104.1	320	32	352
23	264	H James	3104.2	560	56	616
30						

- b What** is the meaning of the term 'subsidiary ledger'?
- c How** can the accounts receivable subsidiary ledger be checked for accuracy?

Accounts payable subsidiary ledger

Learning objective 3

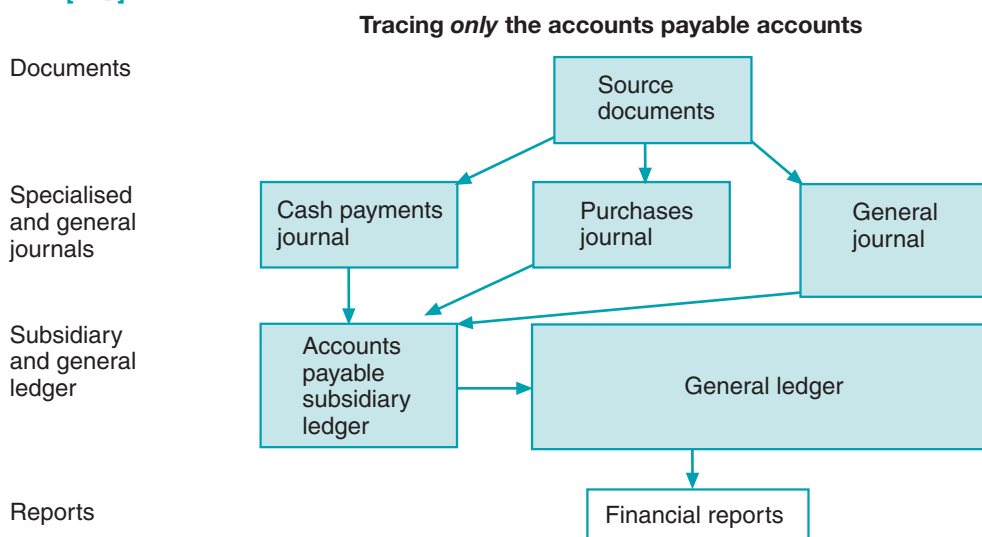
The **accounts payable subsidiary ledger** records all individual accounts payable accounts.



The **accounts payable control account** summarises all information pertaining to accounts payable. It is a liability account.

The introduction of the accounts payable subsidiary ledger and the accounts payable control account also requires some adjustments to the format of the journals. These changes are needed to facilitate posting the totals to the general ledger as well as the details to the subsidiary ledger. Figure [4.8] illustrates the flow of information in the accounting process with the addition of an accounts payable subsidiary ledger.

[4.8]



You are already familiar with the specialist journal for cash payments, the cash payments journal. With the introduction of the accounts payable subsidiary ledger, another specialist journal – a purchases journal – will be incorporated into the accounting process.

Purchases journal

The purchase of assets (other than inventory) on credit is still processed through the general journal.

A business may carry out many *credit* purchase transactions, resulting in hundreds of invoices. A specialised journal – the purchases journal – will facilitate the recording of these *inventory transactions purchased on credit*. It assists with gathering like items together and provides a total value of credit purchase transactions for posting to the accounts payable control account in the general ledger. The credit purchases of inventories previously entered into the general journal will be entered into the purchases journal instead.



The **purchases journal** records all purchases of inventories made on credit.

Figure [4.9] compares how the *credit purchases* entries have appeared in the general journal with how they will appear when entered directly into the purchases journal.

[4.9]

A Foster General journal						
Date 2010	Particulars			Post ref	Debit \$	Credit \$
Nov 1	Inventories	Dr			5 000	
	Capital	Cr				5 000
	(Owner contributes inventories as capital)					
2	Inventories	Dr			620	
	GST clearing	Dr			62	
	Accounts payable control – H Graham	Cr				682
	(Credit purchases ref # 921)					
3	Inventories	Dr			390	
	GST clearing	Dr			39	
	Accounts payable control – L Mason	Cr				429
	(Credit purchases ref # 2475)					
14	Inventories	Dr			550	
	GST clearing	Dr			55	
	Accounts payable control – K Jones	Cr				605
	(Credit purchases ref # AB453)					
	Inventories	Dr			110	
	GST clearing	Dr			11	
	Accounts payable control – O Jackson	Cr				121
	(Credit purchases ref # 2007A58)					

A Foster Purchases journal						
Date 2010	Ref no.	Accounts payable	Post ref	Inventories \$ Dr	GST clearing \$ Dr	Accounts payable control \$ Cr
Nov 2	921	H Graham	4101.1	620	62	682
3	2475	L Mason	4101.4	390	39	429
14	AB453	K Jones	4101.3	550	55	605
	2007A58	O Jackson	4101.2	110	11	121
30				\$1 670	\$167	\$1 837
				(3105)	(4102)	(4101)

As indicated, these entries would now be recorded in the purchases journal instead of the general journal. Only credit purchases of inventory are entered into this purchases journal.

With this process in place, [4.10] illustrates the posting from the purchases journal to the general ledger and the accounts payable subsidiary ledger.

[4.10]

The totals of the purchases journal are posted to the general ledger. Each individual accounts payable entry is posted to the subsidiary ledger. All values posted to the subsidiary ledger include GST when applicable.

Date	Ref no.	Accounts payable	Post ref	Inventories	GST clearing	Accounts payable control
2010				\$ Dr	\$ Dr	\$ Cr
Nov 2	921	H Graham	4101.1	620	62	682
3	2475	L Mason	4101.4	390	39	429
14	AB453	K Jones	4101.3	550	55	605
	2007A58	O Jackson	4101.2	110	11	121
30				\$1 670	\$167	\$1 837
				(3105)	(4102)	(4101)

Dr	Part.	Amt.	Date	Part.	Amt.	Cr
2010		\$			\$	
2010						
4101.1	H Graham		Nov 2	Inventories & GST	682	
			Nov 14	O Jackson	121	
4101.2	O Jackson		Nov 14	K Jones	605	
			Nov 14	L Mason	429	
4101.3	K Jones		Nov 3	Inventories & GST	500	
4101.4	L Mason		Nov 3	Inventories & GST	500	
			Nov 30	Accounts payable control	1 670	
			Nov 30	Inventories & GST	167	
			Nov 30	Accounts payable	167	
			Nov 30	Capital a/c	5 000	
			Nov 30	Inventories	5 000	

Dr	Particulars	Amt.	Date	Particulars	Amt.	Cr
2010		\$			\$	
2010						
3105	Inventories a/c		Nov 1	Capital	5 000	
			Nov 30	Accounts payable	1 670	
4101	Accounts payable control a/c		Nov 30	Inventories & GST	1 837	
			Nov 30	Accounts payable	167	
			Nov 30	Capital a/c	5 000	
			Nov 30	Inventories	5 000	

Date	Particulars	Debit	Credit	Balance
2010		\$	\$	\$
2010				
3105	Inventories a/c			
Nov 1	Capital	5 000		5 000Dr
Nov 30	Accounts payable	1 670		6 670Dr
4101	Accounts payable control a/c			
Nov 30	Inventories & GST		1 837	1 837Cr
4102	GST clearing a/c			
Nov 30	Accounts payable	167		167Dr
5101	Capital a/c			
Nov 1	Inventories		5 000	5 000Cr

From the purchases journal in [4.10], the total of each column is posted to the general ledger. Each accounts payable transaction is also posted to the subsidiary ledger. At the end of the period, a schedule of accounts payable is prepared from the subsidiary ledger. The total of this schedule is checked against the balance of the accounts payable control account in the general ledger. This is illustrated in [4.11].

[4.11]

Prepared from the subsidiary ledger

A Foster Schedule of accounts payable as at 30 November 2010

H Graham	682
O Jackson	121
K Jones	605
L Mason	429
Balance as per control account	<u>\$1 837</u>

Prepared from the general ledger

A Foster Trial balance as at 30 November 2010 (extract)

	Debit \$	Credit \$
Inventories	6 670	
Accounts payable control		1 837
GST clearing	167	
Capital		5 000
	<u>\$6 837</u>	<u>\$6 837</u>

As the total in the purchases journal is posted to the accounts payable control account in the general ledger, the double-entry system is maintained in the general ledger.

Review & practice 3

Use the purchases journal and ledgers of A Foster in [4.10] to answer the following questions.

- What** was the total amount of credit purchases of inventories for November?
- How** much does A Foster owe Jones?
- On 14 November 2010, A Foster purchased furniture on credit from Amart for \$42 000. **Why** is this transaction not entered into the purchases journal of A Foster?
- What** type of account is an 'accounts payable control account'?

► Exercises 4.8 to 4.10, page 296

All journals for accounts payable

The figures on pages 274 and 275 contain a worked exercise with the purchases, cash payments and general journals being posted to the subsidiary ledger and the general ledger. This process is illustrated using T-form accounts in [4.12a] and columnar ledger accounts in [4.12b].

[4.12a]

Su Kim Ling Accounts payable subsidiary ledger					
Dr	Part.	Amt.	Date	Part.	Cr
Date		\$			Amt.
2010			2010		\$
4101.5			G Austin		
Nov 5	Bank	1 200	Nov 2	Inventories & GST	1 320
4101.6			H Grant		
Nov 21	Bank	211	Nov 2	Inventories & GST	605
			20	Inventories & GST	429
4101.7			P Simpson		
Nov 15	Bank	620	Nov 14	Inventories & GST	1 617

All items in this subsidiary ledger are entered in date order.

Posting to T-format ledger accounts

Su Kim Ling Cash payments journal									
Date	Chq no.	Particulars	Post ref	Inventories	Other	Accounts payable control	GST clearing	Bank	
2010				Dr	Dr	Dr	Dr	Cr	
Nov 1	2458	Advertising	2301		610		61	671	
	2459	Inventories		540			54	594	
5	2460	G Austin	4101.5			1 200		1 200	
10	2461	Rates	2417		660			660	
15	2462	P Simpson	4101.7			620		620	
21	2463	Inventories		460			46	506	
	2464	H Grant	4101.6			211		211	
30				\$1 000	\$1 270	\$2 031	\$161	\$4 462	
				(3105)	(X)	(4101)	(4102)		(3103)

Su Kim Ling Purchases journal									
Date	Ref no.	Accounts payable	Post ref	Inventories	GST clearing	Accounts payable control			
2010				Dr	Dr	Dr			
Nov 2	21	H Grant	4101.6	550	55	605			
	8449	G Austin	4101.5	1 200	120	1 320			
14	24AA	P Simpson	4101.7	1 470	147	1 617			
20	8473	H Grant	4101.6	390	39	429			
30				\$3 610	\$361	\$3 971			
				(3105)	(4102)	(4101)			

Su Kim Ling General ledger									
Dr	Part.	Amt.	Date	Part.	Amt.	Cr			
Date		\$			\$				
2010			2010						
2301			Advertising a/c						
Nov 1	Bank	610							
2417			Rates a/c						
Nov 10	Bank	660							
3103			Bank a/c						
			Nov 30	Payments	4 462				
3105			Inventories a/c						
Nov 1	Capital	4 000							
30	Bank	1 000							
	Accounts payable control	3 610							
4101			Accounts payable control a/c						
Nov 30	Bank	2 031							
			Nov 30	Inventories & GST	3 971				
4102			GST clearing a/c						
Nov 30	Accounts payable control	361							
	Bank	161							
5101			Capital a/c						
			Nov 1	Inventories	4 000				

Su Kim Ling General journal					
Date	Particulars	Account no.	Post ref	Debit	Credit
2010				\$	\$
Nov 1	Inventories Capital (Owner contributed inventories)				
		Dr		4 000	
		Cr			4 000

[4.12b]

Posting to columnar format ledger accounts

Su Kim Ling					
Accounts receivable subsidiary ledger					
Date	Particulars	Debit	Credit	Balance	
		\$	\$	\$	\$
2010					
4101.5	G Austin				
Nov 2	Inventories & GST	1 320		1 320 Cr	
5	Bank	1 200		120 Cr	
4101.6	H Grant				
Nov 2	Inventories & GST	605		605 Cr	
20	Inventories & GST	429		1 034 Cr	
21	Bank	211		823 Cr	
4101.7	P Simpson				
Nov 14	Inventories & GST	1 617		1 617 Cr	
15	Bank	620		997 Cr	

All items in this subsidiary ledger are entered in date order.

Su Kim Ling									
Cash payments journal									
Date	Chq no.	Particulars	Post ref	Inventories	Other	Accounts payable	GST clearing	Bank	
2010				Dr	Dr	Dr	Dr	Cr	\$
Nov 1	2458	Advertising	2301		610		61	671	
	2459	Inventories		540			54	594	
5	2460	G Austin	4101.5			1 200		1 200	
10	2461	Rates	2417		660			660	
15	2462	P Simpson	4101.7			620		620	
	2463	Inventories		460			46	506	
21	2464	H Grant	4101.6			211		211	
30				\$1 000	\$1 270	\$2 031	\$161	\$4 462	
				(3105)	(X)	(4101)	(4102)	(3103)	
Su Kim Ling									
Purchases journal									
Date	Ref no.	Accounts payable	Post ref	Inventories		GST clearing	Accounts payable control		
2010				Dr		Dr	Cr		\$
Nov 2	21	H Grant	4101.6	550		55		605	
	8449	G Austin	4101.5	1 200		120		1 200	
14	244A	P Simpson	4101.7	1 470		147		1 617	
20	8473	H Grant	4101.6	390		39		429	
30				\$3 610		\$361		\$3 971	
				(3105)		(4102)		(4101)	

Su Kim Ling					
General ledger					
Date	Particulars	Debit	Credit	Balance	
		\$	\$	\$	\$
2010					
2301	Advertising a/c				
Nov 1	Bank	610		610 Dr	
2417	Rates a/c				
Nov 10	Bank	660		660 Dr	
3103	Bank a/c				
Nov 30	Payments		4 462	4 462 Cr	
3105	Inventories a/c				
Nov 1	Capital	4 000		4 000 Dr	
30	Bank	1 000		5 000 Dr	
	Accounts pay. control	3 610		8 610 Dr	
4101	Accounts payable control a/c				
Nov 30	Inventories & GST		3 971	3 971 Cr	
	Bank	2 031		1 940 Cr	
4102	GST clearing a/c				
Nov 30	Accounts pay. control	361		361 Dr	
	Bank	161		522 Dr	
5101	Capital account a/c				
Nov 1	Inventories		4 000	4 000 Cr	

The schedule of accounts payable is prepared from the accounts payable subsidiary ledger. The trial balance is prepared from the general ledger.

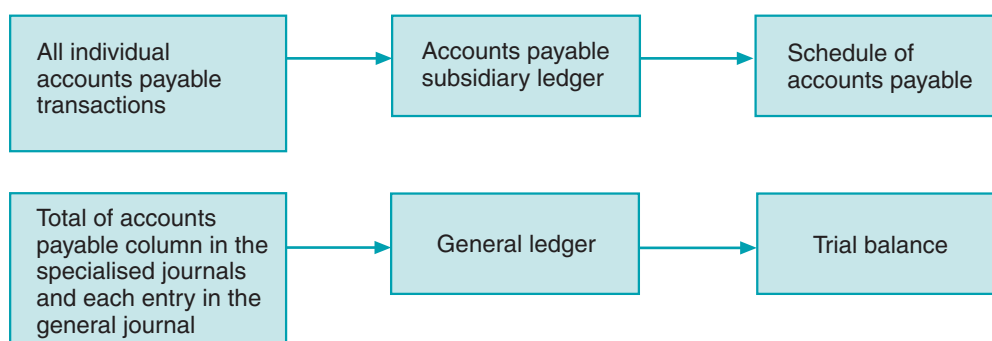
Su Kim Ling Schedule of accounts payable as at 30 November 2010		Su Kim Ling Trial balance as at 30 November 2010	
		Debit \$	Credit \$
G Austin	120		
H Grant	823	Advertising expense	610
P Simpson	997	Rates expense	660
Balance as per control a/c	<u>\$1 940</u>	Bank	4 462
		Inventories	8 610
		Accounts payable control	1 940
		GST clearing	522
		Capital	4 000
		<u>\$10 402</u>	<u>\$10 402</u>

✓ Helpful hints

- The *total* of the accounts payable column in the two specialised journals – purchases and cash payments – is posted to the general ledger.
- Each accounts payable transaction is posted to the relevant *individual* account in the subsidiary ledger.
- Each accounts payable entry in the general journal is posted to the control account in the general ledger and to the relevant individual account in the subsidiary ledger.
- An entry made in total in the control account is duplicated in detail in the subsidiary ledger accounts.

Figure [4.13] provides a visual summary of this process.

[4.13]



Review & practice 4

- a** Using the journals below, post the information to the accounts payable subsidiary ledger and the general ledger.

**Lions Fun Park
Cash payments journal**

Date 2010	Chq no.	Particulars	Post ref	Inventories Dr \$	Other Dr \$	Accounts payable control Dr \$	GST clearing Dr \$	Bank Cr \$
Sept 1	44	Electricity			1 620		162	1 782
5	45	P Kelso	4101.2			461		461
10	46	S Bauer	4101.1			1 022		1 022
15	47	P Kelso	4101.2			352		352
	48	Equipment			2 050		205	2 255
	49	Inventories		3 210			321	3 531
30				\$3 210	\$3 670	\$1 835	\$688	\$9 403

**Lions Fun Park
Purchases journal**

Date 2010	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Sept 2	259	P Kelso	4101.2	420	42	462
3	1135	M Norris	4101.3	500	50	550
13	07-2094	S Bauer	4101.1	2 560	256	2 816
	262	P Kelso	4101.2	350	35	385
21	TA53	A Thomas	4101.4	320	32	352
23	264	P Kelso	4101.2	560	56	616
30				\$4 710	\$471	\$5 181

- b** How is the accounts payable subsidiary ledger checked for accuracy?

► Exercises 4.11 to 4.19, pages 297–305

Part 2 – Unpaid debts

Already know

- How to account for purchases and sales relating to accounts receivable and accounts payable

Need to know

- Accounts receivable and accounts payable:
 - interest on overdue accounts
 - accounting for bad and doubtful debts (including bad debts recovered)

Using this knowledge

- *Provides information for decision-making on the value of outstanding debts and the effectiveness of the business's credit policy*
- *Assists in discharging accountability through charging interest and providing for doubtful debts*

ACCOUNTING VOCABULARY

Bad debts

Doubtful debts

Interest expense

Interest revenue

Provision for doubtful debts

Learning objectives

After completing this section, you should be able to:

- 1 recognise the options for unpaid debts
- 2 complete the accounting process for interest charged
- 3 complete the accounting process for bad debts
- 4 complete the accounting process for doubtful debts
- 5 complete the accounting process for the recovery of bad debts
- 6 complete the accounting process for adjusting the provision for doubtful debts
- 7 explain the concept of factoring.

Options for unpaid debts

Learning objective 1

When debts owing by accounts receivables remain unpaid, the business can charge the accounts receivable interest or write off the debt. If interest is to be charged, appropriate notice must be given to the accounts receivable before adding the interest to the outstanding balance. Debts are written off when there is only a remote chance of recovering the original debt. The accounting procedure for both these circumstances will be addressed, with interest first followed by bad and doubtful debts.

Interest



Learning objective 2

Interest is commercial compensation based on the time value of money.

As part of its credit policy, a business may decide to charge **interest** to customers who do not pay their accounts according to the agreed terms and conditions. If this

Interest charged on an overdue account is sometimes called a finance charge.

If interest is a financial supply, no GST is applicable. If interest is an adjustment event (e.g. account-keeping fee), then GST is applicable.

policy is adopted, all the applicable terms and conditions must be made clear to the customer at the time credit is granted.

The application of GST to interest charged on overdue accounts is a contentious area. Whether GST is applicable to the amount of the additional charge depends on whether the business considers the charge to be a 'financial supply'; that is, it is considered interest due as payment for the extension of the credit terms. If this is the case, GST is not applicable because it is considered a financial supply.

Alternatively, a business may charge an amount for overdue accounts that is considered an additional administrative charge for the inconvenience of trying to collect late debts. In this instance, the charge is not a financial supply but an 'adjustment event'. It is therefore treated as an additional cost that increases the original supply, and GST is applicable. This text will treat interest as a financial supply, which means that no GST is applicable.

Not only can a business charge interest (interest revenue), but also it can be charged with interest (interest expense). An interest expense may be raised if a business does not pay an accounts payable account by the due date, and this late payment contravenes the agreed terms and conditions the business has with the supplier.

Source documents

The charging of interest on an overdue account is evidenced by an authorisation by the credit manager or the person managing the business. It is communicated to the debtor through the issue of a statement at the end of the month. The statement of account is a document that summarises the transactions that have occurred with the customer over the past month. The interest or finance charge, which relates only to amounts that are overdue, would be indicated on this statement.

Interest revenue – overdue accounts receivable

Whether interest is treated as a financial supply (no GST) or an adjustment event (GST is charged), the interest charged on an overdue account always has the effect of increasing the amount owed by the debtor or to the creditor. The accounts receivable account is debited because it is increasing. Interest revenue is credited as it too is increasing.

EXAMPLE 1

Interest revenue – interest charged on overdue accounts receivable

On 25 July 2010, Ashmore Computers had an outstanding accounts receivable balance of \$200 for R Walden that had been unpaid for three months. It has been decided to charge interest of \$10 on her overdue account.

Ashmore Computers General journal				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
July 25	Accounts receivable control – R Walden	Dr	10	
	Interest revenue	Cr		10
	(Interest charged for overdue account)			

Interest expense – overdue accounts payable

If an accounts payable account is not paid by the due date, the business may be charged interest on the overdue amount. The rate of interest to be charged would be made clear in the terms of purchase or on the statement sent at the end of each month. Interest charged by an accounts payable always has the effect of increasing the amount owed. The amount of interest paid is an expense. Interest expense is increasing and is therefore debited.

If interest being charged is considered to be a financial supply by an accounts payable, GST is not applicable. If the accounts payable has advised that the amount owed is an account-keeping fee for the overdue amount, then it would be treated as an adjustment event. This would have the effect of changing the original tax invoice amount and would attract GST.

EXAMPLE 2

Interest expense – interest charged on overdue accounts payable

On 26 July 2010, Ashmore Computers has an outstanding accounts payable balance of \$4 000 owing to Extra Comp Pty Ltd. A statement at the end of the previous month indicates that an interest charge of \$120 has been added to the account.

Ashmore Computers General journal				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
July 26	Interest expense	Dr	120	
	Accounts payable control			
	– Extra Comp Pty Ltd	Cr		120
	(Interest charged on overdue account)			

Review & practice

5

Journalise the following transactions for Ashmore Computers.

- On 26 July 2010, one of our suppliers, Tech and Sound Ltd, advised that an interest charge of \$12 had been recorded on our account. This account has been outstanding for more than 30 days.
- On 27 July 2010, statement number 332 was received from Ads Unlimited advising that it had added a finance charge of \$4 to our overdue account.
- On statement 328, we were advised that AJD Pty Ltd had charged us \$35 on our overdue account (28 July 2010).
- Our customer, O'Reilly's Foods, was sent a statement on 30 July 2010 indicating that they had been charged interest of \$24 on the overdue account.
- On 30 July 2010, we had an outstanding accounts receivable balance of \$300 for F Livingstone. Interest of \$20 has been charged to F Livingstone's account by us.

Bad debts

Learning objective 3

From experience, business owners are aware that not all debts owing to the firm will be paid – despite the best efforts of implementing an appropriate credit policy. Accounting for **bad debts** is an important element of a business's operations. It must be carried out correctly in order for the business to claim the expense as a tax deduction.



A **bad debt** is an accounts receivable's outstanding balance, which it is deemed will not be received.

The Australian Taxation Office has specific criteria that must be met before bad debts can be claimed as an expense for the business.

A debt is bad in many circumstances, including:

- 1 The debtor has died without leaving assets or is insolvent.
- 2 The debtor and the debtor's assets cannot be traced.
- 3 In the case of a corporate debtor, the company is in liquidation and there are insufficient funds to pay the debt.
- 4 There is little or no likelihood of the debt being recovered.

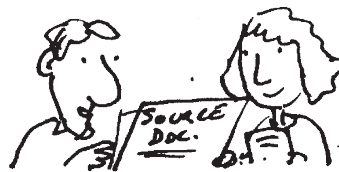
To qualify for a tax deduction, the debt must be considered bad and satisfy the two conditions set out below:

- Notification must be received that the debt will not be paid.
- Revenue must be recognised before the bad debt can be claimed.

As the Australian Taxation Office requires evidence that a debt is bad and may therefore be claimed as a tax deduction, a business should follow a procedure that both attempts to both collect an overdue account and, at the same time, provides such evidence.

The evidence that is considered to be sufficient for a debt to be declared 'bad' varies. It may be a letter or some form of communication from the administrator or receiver appointed by the bankruptcy court as an interim measure. Under these circumstances, the business can be taken over by insolvency practitioners (usually appointed from public accounting firms) either to trade out of its difficulties or to be wound up – to cease trading and to collect remaining debts before being dissolved. The latter would be conducted by a professional (most likely an accountant), who is appointed by the court and known as a liquidator.

Public accounting firms generally use a more positive description for their staff who are insolvency experts – e.g. the insolvency division may be called the Corporate Finance – Restructuring Department.



Bad debt written off

Bad debts are an expense to a business. When a bad debt occurs, it has the effect of increasing expenses, so the expense account is debited. The accounts receivable account is an asset account that is decreasing because it no longer has the potential to be converted to cash. The GST previously received was recorded as a liability to the ATO and now has to be reversed because this liability is decreasing. This is necessary because the previously recorded figure did not eventuate in the collection of GST from the customer.

EXAMPLE 3**Bad debt written off**

On 28 July 2010, Ashmore Computers receives notification that R Walden has been declared bankrupt. Write off R Walden's debt of \$220. (Note that 1/11th of this amount was previously recorded as GST.)

This entry is appropriate at the time bad debts are known and recognised.

**Ashmore Computers
General journal**

Date 2010	Particulars	Post ref	Debit \$	Credit \$
July 28	Bad debts	Dr	200	
	GST clearing	Dr	20	
	Accounts receivable control – R Walden	Cr		220
	(Bad debts written off and GST reversed)			

Bad debt written off and some cash paid

An accounts receivable who has been declared a bankrupt will sometimes, through a third party, come to an arrangement with those to whom money is owed. This is called a deed of company arrangement. On acceptance of such an agreement, the business to which the debt is owed enters a legally binding agreement governed by Part X, ss. 187–243(a) of the *Bankruptcy Act*. Such an arrangement is often called a Part X agreement. The essence of the agreement is that the business accepting part payment of the debt will not seek the remainder of the debt in the future. For simplicity, it is recommended that this adjustment be completed in two journal entries as shown in example 4.

EXAMPLE 4**Bad debt written off and some cash paid**

On 28 July 2010, Ashmore Computers receives notification that C North, who owes \$220, has been declared bankrupt. The company accepts a Part X arrangement in which 40 cents in the dollar is received. Record the receipt of the cash and then write off the remainder of C North's debt. Reverse the GST applicable. (Ashmore Computers operates a cash accounting system.)

The \$220 debt is calculated as follows:

$\$0.40 \times 220$	=	\$88	← Amount received
$\$0.60 \times 220$	=	\$132	← Amount to be written off
$\frac{1}{11}$ th of \$132	=	\$12	← GST amount reversed

These entries are made at the time the bad debt occurs and the part payment is made. This method is known as the **direct write-off method** of accounting for bad debts.

Forty cents in the dollar means that for every dollar owed, 40 cents will be received.

**Ashmore Computers
Cash receipts journal (extract)**

Date 2010	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable Cr \$	GST clearing Cr \$	Bank Dr \$
July 28		C North				88		88

This entry may be entered through the general journal.

Ashmore Computers General journal				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
July 28	Bad debts expense	Dr	120	
	GST clearing	Dr	12	
	Accounts receivable control – C North (Bad debt of \$0.60 in the dollar)	Cr		132

Ashmore Computers General ledger (extract) – T-format					
Dr			Cr		
Date	Part.	Amount \$	Date	Part.	Amount \$
2010			2010		
				Accounts receivable control a/c	
July 1	Balance	220	July 28	Bank	88
				Bad debts & GST	132
		<u>\$220</u>			<u>\$220</u>

Ashmore Computers General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	3104 Accounts receivable control a/c			
July 1	Balance	220		220 Dr
28	Bank		88	132 Dr
	Bad debts & GST		132	0

Doubtful debts

Learning objective 4

When an *accrual accounting system* is being used, the recording of potential bad debts is undertaken to ensure the matching principle is followed. The matching principle requires that the expense of a bad debt is recorded in the same accounting period as the revenue earned from the credit sale that has resulted in the bad debt.

In each accounting period, an estimate is made of those debts that will not be paid. The estimate is then reflected in a doubtful debts expense account and a provision for doubtful debts account. This method is known as the *provision method* of accounting for bad debts.

An adjustment can be made for the GST paid on bad debts. If the business accounts for GST on an accrual basis, it can make an adjustment for GST paid on bad debts when the debt is written off for income tax purposes or 12 months after it becomes due. The **doubtful debts account** is created to record the expense of the estimated amount of bad debts from the current accounting period. The name of this account indicates that the figure in this account reflects debts that the business doubts will be collected.

If a business accounts for GST on a cash basis, no adjustment will be required.



The **doubtful debts account** records debts that are unlikely to be collected. It ensures that the expenses and revenues are matched in the current accounting period.

The doubtful debts account is an expense account for the business and consequently appears in the income statement. This has the effect of reducing the profit recorded by a business.

The **provision for doubtful debts account** is created to reduce the value of the accounts receivable control account before knowing which of the accounts receivables will not pay. This is done so that a more realistic figure is used in end-of-period reports for the asset accounts receivable.



The **provision for doubtful debts** account records debts that are unlikely to be collected. As a negative asset account, it has the effect of reducing the accounts receivable value in the balance sheet.

The value of the provision for doubtful debts account is deducted from the accounts receivable balance in the financial reports. This is shown in example 5.

EXAMPLE 5

On 30 June 2010, it is estimated that \$13 340 will not be paid from the outstanding accounts receivables owing of \$360 000. These accounts are kept on an accrual basis.

General journal (extract)

GST is adjusted only when the debt is declared a bad debt.

Expense account
Negative asset account

Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Doubtful debts	Dr	13 340	
	Provision for doubtful debts (Estimate of bad debts)	Cr		13 340

The financial reports would appear as follows:

Income statement (extract) for the year ended 30 June 2010		Balance sheet (extract) as at 30 June 2010	
<i>Expenses</i>	\$	<i>Assets</i>	\$
Doubtful debts	13 340	Accounts receivable	360 000
		Less Provision for doubtful debts	13 340
			346 660

The inclusion of doubtful debts in the income statement allows for the matching of revenue for the period with the expense incurred in the corresponding period. In the balance sheet, the net figure (accounts receivable less provision for doubtful debts) reflects the realisable value rather than the face value (or gross figure) of the accounts receivable.

Estimating doubtful debts

Aged analysis is illustrated on page 389.

Several methods can be used to estimate the doubtful debts figure in the current period. Some of these are shown in [4.14].

[4.14]

Method	Explanation
Calculate a percentage of the accounts receivable balance at the end of the financial year	If 2% of accounts receivables have not paid over the last few years, then it is reasonable to estimate doubtful debts at 2% of accounts receivable in the current period if all other factors have not changed.
Calculate a percentage of total credit sales for the period	If 1% of total credit sales have been uncollectable over the last couple of periods, then it is reasonable to use this estimate in the current period.
Analyse trends of previous years' bad debt figures	If previous years' bad debts figures are available, then an analysis can be undertaken to assess a doubtful debts figure for the current period.
Use the aged analysis of accounts receivable as a guide	Aged analysis is the division of the accounts receivable debts into current, 30, 60 and over-90 day debts. From this, an assessment can be made of each individual accounts receivable and the likelihood of receiving payment.
Appraise the local environmental knowledge	If customers are local and known to be experiencing difficulties, this local knowledge can assist in identifying customers with potential difficulties in paying their accounts.
Consider changes to the credit policy	A loosening or tightening of a business's credit policy may result in more or less bad debts than were experienced under the previous credit policy. Estimation of the doubtful debt figures would be altered accordingly.
Assess the future economic climate	The level of bad debts may fluctuate with changes in the economic climate, whether a recession or growth period. A recession can increase bad debts, while growth periods usually enable most customers to pay their debts.

Many businesses use a combination of these methods to help them more accurately estimate the doubtful debts for the period.

Review & practice 6

- a G Harrow wishes to write off as uncollectable one account for \$1 408. This amount is in the name of G Pendall, and GST is applicable. Record the necessary entry to write this debt off as paid in the general journal.
- b D Collin's ledger reveals an accounts receivable balance of \$132 000. It is estimated that \$956 of this will not be collected. Record the necessary entry in the general journal and show the extracts from the relevant financial reports as at 30 June 2010.
- c The balance of accounts receivable as at 30 June 2010 is \$250 000. Past experience has shown the owner of the business, T O'Kane, that 2% of accounts receivable will prove to be bad debts. Calculate the doubtful debts figure for the business. Record the necessary entry in the general journal and show the extracts from the relevant reports as at 30 June 2010.

► Exercise 4.21 to 4.26, pages 305–6

Recovery of bad debts

Learning objective 5

There are times when some accounts receivable that have been written off as bad debts are in a financial position to honour their original debt either in part or in full. This situation can arise when customers wish to:

- restore their credit rating
- rebuild their reputation as creditworthy customers
- practise ethical principles.

Any recovery of bad debts involves two steps.

Step 1



Reverse the original debt write-off.

General journal (extract)

Date 2009	Particulars	Post ref	Debit \$	Credit \$
July 31	Accounts receivable control			
	– G Henderson	Dr	4 400	
	GST clearing	Cr		400
	Bad debts recovered	Cr		4 000
	(Bad debt recovered as per advice)			

The accounts receivable account has been reinstated with the debt owing. The GST clearing liability has been increased to recognise the amount owing to the Australian Taxation Office. The bad debts recovered account recognises the value of the account revenue and is classified in the income statement for the period ended 30 June 2010 as an operating revenue.

Step 1



Record the payment received.

Cash receipts journal (extract)

Date 2009	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable control Cr \$	GST clearing Cr \$	Bank Dr \$
July 31		G Henderson				4 400		4 400

After posting these entries to the ledger:

- the account of G Henderson will have a nil balance
- GST will be recognised as owing
- revenue from bad debts recovered will be recognised.

Here is the accounts receivable ledger account that reflects the final situation:

General ledger (extract)

Dr			Cr		
Date	Part.	Amount \$	Date	Part.	Amount \$
2009			2009		
	Accounts receivable – G Henderson				
July 31	Bad debts & GST	4 400	July 31	Bank	4 400
		<u>\$4 400</u>			<u>\$4 400</u>

General ledger (extract)

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Accounts receivable – G Henderson			
July 31	Bad debts & GST	4 400		4 400 Dr
	Bank		4 400	0

Review & practice

7

- a** On 30 June 2010, B Norris was advised by the liquidator that the cheque enclosed for \$561 owed by G Smith would be the final payment from this debtor. As G Smith's debt had previously been written off as bad, record the recovery of this debt in the books of B Norris.
- b** On 5 September 2008, you were advised to create a provision for doubtful debts account at 3% of net sales. Net sales were \$45 000. H Porter owed \$3 300 (including GST) at that time. On 31 May 2009, you were advised that this debt was unrecoverable. On 31 May 2010, H Porter unexpectedly sent you a cheque in settlement of the debt. Journalise these transactions and post the information to the appropriate subsidiary account.

► Exercises 4.27 to 4.29, pages 306–7

Adjusting the provision for doubtful debts

Learning objective 6

The balance of the provision for doubtful debts account will change during the accounting period as bad debts are written off against the provision amount. In addition, the base from which estimated bad debts is calculated changes. For example, 2% of credit sales in the current year will not equal 2% in the subsequent year. Therefore, the value of the provision for doubtful debts account is not the value of the estimated bad debts figure at the end of a period. An adjustment is usually required to align the balance of the provision for doubtful debts with the newly estimated figure for bad debts.

EXAMPLE 6

The provision for doubtful debts account for Sam's Engineering had a balance at 1 July 2009 of \$25 000. During the financial year, bad debts of \$550 (10% GST included) were written off and a recovery of \$1 540 was made. The balance of accounts receivable as at 30 June 2010 is \$255 400. From experience, 10% of customer accounts will not be recovered. Adjust the provision for doubtful debts to reflect the estimated bad debts figure.

Sam's Engineering
General journal (extract)

Date 2009/10	Particulars	Post ref	Debit \$	Credit \$
DY	Bad debts	Dr		500
	GST clearing		50	
	Accounts receivable control	Cr		550
	(Bad debts written off as per advice)			
	Accounts receivable control	Dr	1 540	
	GST clearing	Cr		140
	Bad debts recovered	Cr		1 400
	(Recovery of bad debts as per advice)			
June 30	Provision for doubtful debts	Dr	500	
	Bad debts	Cr		500
	(Balance-day adjustment)			
	Doubtful debts	Dr	1 040	
	Provision for doubtful debts	Cr		1 040
	(Adjustment of provision account to 10% of accounts receivable)			

DY = During year.

Sam's Engineering
General ledger (extract) – T-format

Dr			Cr		
Date	Part.	Amount \$	Date	Part.	Amount \$
2009/10			2009/10		
3104A	Provision for doubtful debts				
			Jul 1	Balance	25 000
Jun 30	Bad debts	500	Jun 30	Doubtful debts	1 040
	Balance c/d	25 540			
		<u>\$26 040</u>			<u>\$26 040</u>
			Jul 1	Balance b/d	25 540

Sam's Engineering
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/10				
3104A	Provision for doubtful debts			
Jul 1	Balance			25 000 Cr
Jun 30	Bad debts	500		24 500 Cr
	Doubtful debts		1 040	25 540 Cr

The provision for doubtful debts account needs to be adjusted by \$1 040 to achieve the desired balance of \$25 540. Prior to the adjustment for doubtful debts, the account had a balance of \$24 500. Therefore, \$25 540 less \$24 500 equals \$1 040. This is how much the provision for doubtful debts must change to reflect the estimated amount of doubtful debts. To calculate this figure:

- 1 Post all appropriate entries to the provision for doubtful debts account.
- 2 Pencil balance the provision account (if using T-format).
- 3 Calculate the required balance (10% of accounts receivable in this instance).
- 4 Take the result of step 2 from step 3.
- 5 The entry is:

Doubtful debts	Dr
Provision for doubtful debts	Cr

This process is usually completed at the end of the financial period as a balance-day adjustment.

The complete process for bad debts, doubtful debts, GST adjustments and the adjustment of the provision for doubtful debts accounts to reflect the new estimated figures is shown in example 7.

EXAMPLE 7

Financial period		Transaction	Journal entry	Dr \$	Cr \$
1st	Provision created	It was estimated that \$13 340 are potential bad debts	Doubtful debts Dr Provision for doubtful debts Cr	13 340	13 340
	Closing entry		Profit and loss summary Dr Doubtful debts Cr	13 340	13 340
2nd	Bad debt recognised	Advice received that \$15 785 is to be recognised as bad debts (GST included)	Bad debts Dr GST clearing Dr Accounts receivable control Cr	14 350 1 435	15 785
	Bad debts recovered	Received \$110 from an accounts receivable whose debt has previously been written off as bad	Accounts receivable control Dr GST clearing Cr Bad debts recovered Cr	110	10 100
			Cash receipts journal Accounts receivable control Cr		110
	Balance-day adjustment	Transfer from provision that portion of bad debts that belongs to the previous period (\$13 340). If bad debts are greater than the provision account, then only transfer that portion of bad debts equal to provision	Provision for doubtful debts Dr Bad debts Cr	13 340	13 340
	Adjustment to provision for doubtful debts account	Adjust the provision for doubtful debts account to be \$15 000	Doubtful debts Dr Provision for doubtful debts Cr	15 000	15 000
	Closing entries		Profit and loss summary Dr Doubtful debts Cr Bad debts Cr	16 010	15 000 1 010
			Bad debts recovered Dr Profit and loss summary Cr	100	100

The steps to complete the transfers within one accounting period are summarised as follows:



- Step 1** Write off the bad debt.
- Step 2** Transfer the bad debts to the provision for doubtful debts account. (Only up to the amount of the provision.)
- Step 3** Calculate the amount required for the new provision for doubtful debts account – doubtful debts amount. Prepare the general journal entry.
- Step 4** Close off the bad debts and doubtful debts accounts to the profit and loss summary account.



Review & practice 8

- a** D Bridger commenced business on 5 April 2009. As at 30 June 2009, the accounts receivable control account balance was \$45 000 after bad debts totalling \$1 500 were written off. Provision for doubtful debts is to be 2% of the accounts receivable balance.
You are required to prepare:
 - i** general journal entries to write off the bad debts, create the provision for doubtful debts and show closing entries
 - ii** relevant general ledger accounts as at 30 June 2009.
- b** As at 1 July 2009, the balance of the provision for doubtful debts account was \$800. As at 30 June 2010, the balance of the accounts receivable control account was \$75 000 (after \$5 200 in bad debts were written off during the year) and the new provision for the doubtful debts account is to be \$2 000.
You are required to prepare:
 - i** necessary general journal entries (including closing entries)
 - ii** relevant general ledger accounts
 - iii** extracts from financial reports.
- c** The economic climate is well known for its effects on the bad debt levels of a business. However, major changes to government initiatives can also influence decisions. Consider the article 'The GST legacy' on page 290 and use well-constructed sentences to answer the questions that follow.



The GST legacy

Bankruptcies and bad debts

Peter Mac

Australian small businesses are suffering an extremely high rate of bankruptcies and bad debts as a result of the introduction of the GST. Much of the crisis arises not only from the extra tax itself, but also from other taxation 'reform' initiatives, including the quarterly business activity statement (BAS), which have left the smaller businesses drowning in a sea of paper work.

The result, coupled with a general downturn in the economy, has led to a critical struggle by many firms to meet their obligations to creditors on time. One report shows that the average number of days taken by businesses to pay their creditors blew out to a two-year high of 66 days in 2001.

According to the business information firm Dun and Bradstreet, the situation reflects the first casualties of the new taxation system. In a remarkably frank series of statements they noted: 'Almost 70% of business owners have told us their available cash flow has decreased as a result of making quarterly payments under the new tax system.'

'This figure has risen from 44% in February ... Companies are finding it increasingly difficult to pay their creditors on time because the cash just isn't there.'

'The domino effect of this cash flow squeeze is placing enormous strains on businesses right along the supply chain. Weak trading conditions, increased competition, rising costs and shrinking sales have all contributed to the strain. Many companies have simply buckled under the strain.' The 'buckling' is expressed in a rapidly rising rate of business failures.

Dun and Bradstreet's reports note that '... the average number of bankruptcies in the first quarter of 2001 was 32.9% higher across all states as compared to the first quarter of 2000.' 'They rose markedly from January to March 2001, jumping from 22.2% over the previous December quarter ... The total amount of dollars placed in claims (for bad debts) over this period also climbed by a national average of 144 %.'

Needless to say, the brunt of the crisis falls hardest on employees of the wrecked companies. However, in many cases the business in question comprises a sole trader, a small group of partners or a contractor (often a tradesperson), and they also end up on the scrap heap ...

Source: Mac, P 2001, The Guardian, 30 May.

- i List two reasons that Peter Mac gives for bad debts and bankruptcies being high at the time the article was written.
- ii **How** many days are creditors taking to pay their debts in 2001?
- ii **What** reason have small businesses given to Dun and Bradstreet for delaying payment of their debts?
- iv **Who** have suffered the most because of this situation?

► Exercises 4.30 to 4.39, pages 307–9

Factoring

Learning objective 7

Trying to get accounts receivables to pay can be time consuming and costly. Some enterprises use a system called factoring. Factoring is when businesses sell their accounts receivables to another business, which undertakes the risk and collects the debts. There has been some criticism of this system from customers involved. The main problem arises when a debt is in dispute. The business undertaking factoring is only interested in the customer paying the debt, and is generally not concerned about settling any dispute. It is the original business to whom the debt was owed that would undertake the investigation into issues in dispute.

The following article has details about factoring, with particular emphasis on costs and conditions that apply to this alternative form of financing.

Cash flow finance (factoring)

Ron Sandilands (Small Business Services)

FactoFring and confidential discounting Introducing an alternative form of finance for small business

But first some explanation of the terms used.

Factor – the term refers to the company which buys the book debts and supplies the money.

Factoring – the term refers to the activity between the factor and the small business. The business's customers are aware of the arrangement between the factor and the business.

Confidential discounting – The business's customers are not aware of the arrangement between the factor and the business.

Cash flow is essential to ensure the smooth functioning of the operation of any business.

There are **four ways to fund** a growing business:

- bank overdraft
- equity partner
- stop and consolidate
- factoring or confidential discounting.

Traditionally the most popular has been bank overdraft. A bank overdraft will always be needed but over the last few years factoring has become a popular alternative. The factoring industry has seen a 44% growth in the number of clients and annual turnover in the last two years. Costs are now competitive and technology has made the industry very efficient.

- Factoring automatically increases the amount of finance available as the business's credit sales increase. Usually, the factor's only security is the unpaid invoices.
- Factoring or confidential discounting are two options available for small to medium sized businesses to improve their cash flow.

What is factoring?

Factoring is the purchase by the factor and the sale by the business of book debts on a regular basis, usually for immediate cash. The sales accounting functions are then provided by the factor who manages the sales ledger and collection of accounts under the terms agreed with the business.

Confidential discounting is the purchase by the factor and the sale by the business of book debts on a regular basis, for immediate cash. The sales accounting functions are retained by the business. The debtor is unaware of the involvement of the factor.

How does it work?

- 1 The business sells its book debts to a factor on a regular basis.
- 2 The factor pays the business up to 90% of the invoice or statement value in cash, normally within 24 hours of receiving the invoice or the statement.
- 3 The balance is paid to the business after the debt has been collected.
- 4 The factor takes over the management of the debtor's ledger and sends the monthly accounts to the business's customers.

Features

Improved cash flow – A better cash flow helps to save time and money, leads to greater profits and increases confidence in planning.

Flexibility – Factoring is one of the most flexible forms of finance available to business. As credit sales increase so do the funds from the factor.

Look at it like an **overdraft without any limit**, and there is no need to give real estate as security!

Costs

Factors charge a **service fee** plus **interest** on the funds utilised. The **service fees** depend on volume of credit sales and the service provided. Service fees can range between 0.2 and 2.5% of the statement value.

The cost of funds is the same as or lower than current bank overdraft rates.

Collections

With their professional approach and experience, a factor can often collect debts more quickly and effectively than a small independent business.

Credit management

The factor can give the business regular, up to date information on the status of its sales ledger and the performance of its trade debtors.

Credit protection

The factor undertakes credit checks on the business's current and potential debtors and may set a rate for credit protection under the arrangements.

Credit assessment

A factor has access to credit reference databases that many businesses cannot afford.

What's in it for small businesses?

Potential cost savings from factoring include:

- complete elimination of bank overdraft and account keeping charges



- reduction and/or elimination of bad debts
- credit control, administration and account management costs are lowered
- no longer necessary to give discounts for early payment
- management time saved can be diverted to other aspects of the business
- possible discounts from suppliers for early or prompt payment.

Which businesses qualify?

The factor looks for a business with the following criteria:

- The business should have a projected minimum annual credit sales of \$200 000.
- Goods should be sold on normal credit terms.
- There should be a spread of debtors so that no one debtor is responsible for more than 30% of the total debtor's ledger.

- Factoring is not suitable for retailers selling to private individuals, contractors who receive progress payments or business sectors where trade disputes can arise.

What does a typical business look like?

- Has rapid sales growth
- Sells tangible goods or services
- Has at least two years of profitable trading
- Regularly exceeds its current overdraft limit
- Is unable to meet large orders or seasonal peaks
- Is fully borrowed against fixed assets
- Has credit terms with trade creditors
- Has good credit history
- Majority of sales are not on consignment or 'sale or return'.

Source: Sandilands, R <www.ronsandilands.com.au>.

Review & practice 9

Review the article 'Cash flow finance (factoring)' and send a letter to your superior about whether you think this is a workable option for most businesses. Pay particular attention to the advantages and disadvantages of this option of financing.

Understandings

- When recording using the control account/subsidiary ledger technique, two important principles must be followed:
 - Debit must always equal credit in the general ledger.
 - Whatever is posted in total to either side of the general ledger must also be posted in detail to the same side of the subsidiary ledger.
- In a manual system, specialised journals classify like items together and act as an aid for posting to the ledger by analysing the transaction into its debit and credit components.
- Despite the best efforts of implementing an appropriate credit policy, bad debts can occur.
- To ensure a proper matching of revenues with expenses, a provision must be made for debts that are doubtful. This is an estimate of the amount of accounts receivable that could become bad in the next accounting period.
- Various methods can be used to estimate the amount of doubtful debts.

Exercises

★ 4.1 Sales journal with subsidiary ledger

From the following journal, post the transactions into the accounts receivable ledger and the general ledger of G Browne.

**G Browne
Sales journal**

Date 2009	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Jan 16	82	D Haupt	3104.1	160	16	176
22	83	J Weidman	3104.4	270	27	297
24	84	F Murphy	3104.2	1 103	0	1 103
28	85	L Van Ristell	3104.3	80	8	88
29	86	F Murphy	3104.2	60	6	66
31				\$1 673	\$57	\$1 730
				(1101)	(4102)	(3104)

★ 4.2 Sales journal with subsidiary ledger

W Baxter operates a business trading as Baxter's Building Store. The following is the sales journal for April 2009. Post the transactions to the subsidiary and general ledgers.

**Baxter's Building Store
Sales journal**

Date 2009	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Apr 2	362	H Munro	3104.5	450	45	495
4	363	D Gordon	3104.1	980	98	1 078
5	364	G Jones	3104.2	1 000	100	1 100
10	365	A Patane	3104.6	620	62	682
14	366	J Miller	3104.4	600	60	660
24	367	A Kinder	3104.3	1 850	185	2 035
30				\$5 500	\$550	\$6 050
				(1101)	(4102)	(3104)

★ 4.3 Sales journal with subsidiary ledger

D Carter is a sole trader who owns a florist shop. The following are credit sales for the month of June 2009. Post the transactions to the subsidiary and general ledgers.

**D Carter
Sales journal**

Date 2009	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Jun 1	26	F Eady	3104.3	230	23	253
2	27	J Campbell	3104.2	60	6	66
6	28	C George	3104.4	220	22	242
9	29	J Campbell	3104.2	30	3	33
15	30	A Caesar	3104.1	200	20	220
28	31	C George	3104.4	140		140
30				\$880	\$74	\$954
				(1101)	(4102)	(3104)

★★ 4.4 Sales journal



L Fanes is the owner of a gift shop. Explain why the credit sale of a desk used in the office since 2000 is NOT recorded in the sales journal.

★★ 4.5 Posting the sales, cash receipts and general journals

S Walton is the owner of a small business. Post the transactions that follow to the subsidiary and general ledgers.

S Walton
Cash receipts journal

Date 2009	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr	Accounts rec. control Cr \$	GST clearing Cr	Bank Dr \$
Jun 1	10	Capital			10 000			10 000
3	CRS	Sales		9 500			950	10 450
8	11	Rent revenue			1 400		140	1 540
9	CRS	Sales EFTPOS		620			62	682
15	12	R Robinson	3104.3			500		500
18	13	Commission revenue			260		26	286
19	CRS	Sales		9 400			940	10 340
	14	Rent revenue			400		40	440
22	15	W Tozer	3104.4			1 100		1 100
30				\$19 520	\$12 060	\$1 600	\$2 158	\$35 338

S Walton
Sales journal

Date 2009	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Jun 10	99	R Robinson	3104.3	600	60	660
12	215	W Tozer	3104.4	1 100	110	1 210
14	216	P Cartwright	3104.1	720	72	792
	217	Dowling & Dowling	3104.2	80	8	88
26	218	W Tozer	3104.4	650	65	715
30				\$3 150	\$315	\$3 465

S Walton
General journal

Date 2010	Particulars	Acct no.	Post ref	Debit \$	Credit \$
Jun 30	Cost of goods sold Inventories (Recording the cost of sales for the month)	Dr Cr		10 250	10 250

★★ 4.6 Posting the sales, cash receipts and general journals to the subsidiary and general ledgers

Australian Zoo has provided you with three of its journals. Post the transactions that follow to the zoo's subsidiary and general ledgers. Prepare a schedule of accounts and a trial balance as at 30 September 2010.

**Australian Zoo
Cash receipts journal**

Date 2010	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable control Cr \$	GST clearing Cr \$	Bank Dr \$
Sept 1	623	Commission revenue			2 400		240	
	CRS	Sales		940			94	3 674
5	CRS	G Gambro	3104.1			715		715
10	624	Commission revenue			1 890		189	2 079
	625	C Manners	3104.2			946		946
15	CRS	Sales EFTPOS		1 940			194	2 134
	626	G Gambro	3104.1			770		770
30				\$2 880	\$4 290	\$2 431	\$717	\$10 318
				(1101)	(X)	(3104)	(4102]	(3103)

**Australian Zoo
Sales journal**

Date 2010	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Sept 2	6259	G Gambro	3104.1	650	65	715
3	6260	C Manners	3104.2	860	86	946
14	6261	S Hooper	3104.3	720	72	792
	6262	G Gambro	3104.1	700	70	770
21	6263	G Gambro	3104.1	693		693
23	264	S Hooper	3104.3	660	66	726
30				\$4 283	\$359	\$4 642
				(1101)	(4102]	(3104)

**Australian Zoo
General journal**

Date 2010	Particulars		Acct no.	Debit \$	Credit \$
Sept 1	Inventories	Dr		10 000	
	Capital	Cr			10 000
	(Owner contributed inventories as capital)				
30	Cost of goods sold	Dr		2 135	
	Inventories a/c	Cr			2 135
	(Total cost of sales for the month)				

★ 4.7 Accounts receivable control account

Show how the accounts receivable control account in the general ledger would appear after the following information for the month of May 2009 has been posted. Balance the account as at the end of May 2009.

Balance of accounts receivable control account (1 May 2009)	\$2 500
Credit sales (including GST)	\$9 473
Cash received from accounts receivable and discount given (including GST)	\$5 537

★ 4.8 Posting from the purchases journal to the ledgers

H Soukup is a sole trader who owns a florist shop. The following are credit purchases for the month of January 2009. Post the transactions to the subsidiary and general ledgers.

H Soukup Purchases journal						
Date 2009	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Jan 16	1224	C Morris	4101.3	170	17	187
22	44	T Kime	4101.2	290	29	319
24	84	W Ray	4101.4	1 100	110	1 210
28	209	A Hannigan	4101.1	80	8	88
29	41	C Thuan	4101.5	59		59
31				\$1 699	\$164	\$1 863
				(3105)	(4102)	(4101)

★ 4.9 Posting from the purchases journal to the ledgers

The following are credit purchases for the month of June 2009 for J Choe. Post the transactions to the subsidiary and general ledgers.

J Choe Purchases journal						
Date 2009	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Jun 2	442	M Gosney	4101.1	600	60	660
4	A230	I Lee	4101.2	670	67	737
5	29	H Boevink	4101.3	1 000	100	1 100
10	255	R Mumford	4101.4	330	33	363
14	J220	J Stubbings	4101.5	600	60	660
24	387	C Raboczi	4101.6	1 200	120	1 320
30				\$4 400	\$440	\$4 840
				(3105)	(4102)	(4101)

★★ 4.10 Credit transactions and subsidiary ledgers



'Information from the credit journals (sales and purchases) should be posted more frequently to the subsidiary ledgers than to the control accounts.'

Write a letter of advice to the accounts personnel in response to this statement, which was made by the financial controller of the business.

★★ 4.11 Accounts payable subsidiary ledger – trial balance

Post the information from the purchases and cash payments journals below for the business of C Mitrow to the subsidiary and general ledgers. Prepare a schedule of accounts and a trial balance as at 30 September 2009.

C Mitrow
Purchases journal

Date 2009	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Sept 6	15	C Sandell	4101.5	430	43	473
8	S325	Delaney Services	4101.1	990	99	1 089
14	17	C Sandell	4101.5	1 060	106	1 166
15	10039	D Leyden	4101.3	240	24	264
22	868K	M Kingston	4101.2	103		103
	971	A Oliver	4101.4	90	9	99
27	21	C Sandell	4101.5	2 100	210	2 310
				(3105)	(4102)	(4101)

C Mitrow
Cash payments journal

Date	Chq no.	Particulars	Post ref	Inventories Dr \$	Other Dr \$	Accounts payable control Dr \$	GST clearing Dr \$	Bank Cr \$
Sept 8	89	Cost of goods sold (cartage)			120		12	132
10	90	Inventories		2 010			201	2 211
17	91	C Sandell	4101.5			1 639		1 639
21	92	Advertising			250		25	275
	93	Rent expense			1 400		140	1 540
24	94	Inventories		1 000			100	1 100
26	95	Telephone			140		14	154
30	96	M Kingston	4101.2			103		103
	97	Inventories		2 160			216	2 376
	98	Cost of goods sold (cartage)			90		9	99
				(3105)	(X)	(4101)	(4102]	(3103)

★★ 4.12 Accounts payable subsidiary ledger – trial balance

Post the information from the purchases and cash payments journals for the business of E Sesta to the subsidiary and general ledgers. Prepare a schedule of accounts and a trial balance as at 31 January 2010.

E Sesta Purchases journal						
Date 2010	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Jan 6	200	J Tennant	4101.3	260	26	286
8	4721	B Power	4101.2	100	10	110
12	A019	N Minahan	4101.1	300	30	330
13	07-123	S Walker	4101.4	820	82	902
23	4758	B Power	4101.2	100	10	110
28	205	J Tennant	4101.3	650	65	715
				\$2 230	\$223	\$2 453
				(3105)	(4102)	(4101)

E Sesta Cash payments journal								
Date 2010	Chq no.	Particulars	Post ref	Inventories Dr \$	Other Dr \$	Accounts payable control Dr \$	GST clearing Dr \$	Bank Cr \$
Jan 2	713	Rent expense			450		45	495
3	714	Inventories		700			70	770
	715	Electricity			120		12	132
8	716	Telephone			180		18	198
9	717	Inventories		2 160			216	2 376
15	718	N Minahan	4101.1			300		300
	719	Inventories		820			82	902
17	720	Rent expense			450		45	495
20	721	B Power	4101.2			86		86
26	722	Inventories		560			56	616
				\$4 246	\$1 200	\$386	\$544	\$6 370
				(3105)	(X)	(4101)	(4102)	(3103)

★ 4.13 Accounts payable control account

Show how the accounts payable control account would appear in the general ledger after the following information for the month of August 2009 has been posted. Balance the account as at the end of August.

Balance of accounts payable control account (1 August 2009)	\$1 593
Credit purchases (including GST)	\$8 446
Cash paid to accounts payable	\$4 302

★★ 4.14 Subsidiary ledgers – trial balance

J Morgan commenced business on 4 September 2010. The entries in the journals are shown on the opposite page.

You are required to prepare:

- general and subsidiary ledgers
- schedules of accounts receivable and accounts payable
- trial balance as at 30 September 2010.

**J Morgan
General journal**

Date 2010	Particulars	Post ref	Acct no.	Debit \$	Credit \$
Sept 4	Inventories	Dr		60 000	
	Furniture	Dr		12 000	
	Delivery vehicles	Dr		100 000	
	Bank loan	Cr			90 000
	Capital	Cr			82 000
	(Commenced business on 4 September)				
Sept 30	Cost of goods sold	Dr		9 852	
	Inventories	Cr			9 852
	(Cost price of goods sold)				

**J Morgan
Cash receipts journal**

Date 2010	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable control Cr \$	GST clearing Cr \$	Bank Dr \$
Sept 4		Capital			80 000			80 000
9		Sales		9 000			900	9 900
15		Commission revenue			200		20	220
20		T Younge				2 640		2 640
30				\$9 000	\$80 200	\$2 640	\$920	\$92 760
				(1101)	(X)	(3104)	(4102)	(3103)

**J Morgan
Sales journal**

Date 2010	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Sept 5		T Younge		2 400	240	2 640
6		J Hooper		3 600	360	3 960
10		T Younge		1 420	142	1 562
30				\$7 420	\$742	\$8 162
				(1101)	(4102)	(3104)

**J Morgan
Purchases journal**

Date 2010	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Sept 6		S Mooney		2 310	231	2 541
7		M Booker		5 000	500	5 500
9		T McPherson		2 300	230	2 530
		M Booker		400	40	440
30				\$10 010	\$1 001	\$11 011
				(3105)	(4102)	(4101)



J Morgan
Cash payments journal

Date 2010	Chq no.	Particulars	Post ref	Inventories Dr \$	Other Dr \$	Accounts payable control Dr \$	GST clearing Dr \$	Bank Cr \$
Sept 6		Drawings			200			200
7		Rent expense			1 200		120	1 320
		Inventories		3 000			300	3 300
10		S Mooney				2 541		2 541
20		Inventories		5 230			523	5 753
30				\$8 230	\$1 400	\$2 541	\$943	\$13 114
				(3105)	(X)	(4101)	(4102)	(3103)

★★ 4.15 **Subsidiary ledgers – trial balance**

On 1 July 2009, D Walker's general ledger had the account balances shown below. On this date, D Walker decided to install a subsidiary ledger system for accounts receivable and accounts payable. Transactions for the month of July 2009 are shown below and on page 301.

You are required to:

- a implement a subsidiary ledger system for accounts receivable and accounts payable
- b post journal entries to the ledger
- c prepare schedules of accounts receivable and accounts payable
- d take out a trial balance as at 31 July 2009.

Accounts receivable balances		\$	Accounts payable balances		\$
M Brampton		3 200	Ellis & Co.		1 900
P Parfitt		2 184	A Holland		2 000
J Westlake		1 090	R Munro		1 056
Assets			Liabilities and owner's equity		
Bank		7 298	Loan		15 000
Inventories		15 300	Capital		28 416
Furniture		5 000			
Motor vehicle		14 300			

D Walker
Purchases journal

Date 2009	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Jul 4	2961	R Munro		210	21	231
8	32	A Holland		600	60	660
12	46	A Holland		740	74	814
16	93	S Goodner		180	18	198
20	A50	Ellis & Co.		450	45	495
				\$2 180	\$218	\$2 398



D Walker
Cash payments journal

Date 2009	Chq no.	Particulars	Post ref	Inventories Dr \$	Other Dr \$	Accounts payable control Dr \$	GST clearing Dr \$	Bank Cr \$
Jul	4	206		400			40	440
	8	207			200		20	220
	11	208				2 000		2 000
	14	209		960			96	1 056
	19	210				1 900		1 900
	22	211			170		17	187
	25	212				1 056		1 056
	29	213		1 200			120	1 320
				\$2 560	\$370	\$4 956	\$293	\$8 179

D Walker
Sales journal

Date 2009	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Jul	3	206		2 000	200	2 200
	14	207		920	92	1 012
	20	208		600	60	660
	27	209		200	20	220
	28	210		700	70	770
				\$4 420	\$442	\$4 862

D Walker
Cash receipts journal

Date 2009	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable control Cr \$	GST clearing Cr \$	Bank Dr \$
Jul	3	CRS		1 000			100	1 100
	7	289			400		40	
		CRS		2 100			210	2 750
	10	290			90		9	99
	13	291				2 084		2 084
	20	CRS		1 900			190	2 090
	23	292				1 000		1 000
	28	CRS		960			96	1 056
				\$5 960	\$490	\$3 084	\$645	\$10 179

The cost of goods sold during the month was \$7 284.

★★★ **4.16 Subsidiary ledgers – trial balance**

On 1 March 2010, I Van Bruggen's general ledger had the account balances shown on page 302. On this date, I Van Bruggen decided to use a subsidiary ledger system for accounts receivable and accounts payable. Transactions for the month of March 2010 are shown on pages 302–3.

You are required to:

- a implement a subsidiary ledger system for accounts receivable and accounts payable
- b post journal entries to the ledgers
- c prepare schedules of accounts receivable and accounts payable
- d take out a trial balance as at 31 March 2010.

Accounts receivable balances		\$	Accounts payable balances		\$
R Allen		3 180	S Barnes		800
P Barry		1 328	A Ford		1 732
B Ritchie		1 126	P Hill		936
E Sunco		982	L Scorgie		521

Assets			Liabilities and owner's equity		
Bank		\$15 329	Mortgage		\$41 000
Inventories		\$19 372	Capital		\$66 628
Motor vehicle		\$12 300			
Building		\$58 000			

**I Van Bruggen
Purchases journal**

Date 2010	Ref no.	Accounts payable	Post ref	Inventories Dr \$	GST clearing Dr \$	Accounts payable control Cr \$
Mar 2	128	L Scorgie		200	20	220
5	62	C Townsend		170	17	187
14	91	A Ford		500	50	550
21	211	P Hill		700	70	770
28	149	L Scorgie		410	41	451

**I Van Bruggen
Cash payments journal**

Date 2010	Chq no.	Particulars	Post ref	Inventories Dr \$	Other Dr \$	Accounts payable control Dr \$	GST clearing Dr \$	Bank Cr \$
Mar 2	81	S Barnes				800		800
6	82	Inventories		1 000			100	1 100
10	83	Rent expense			600		60	660
14	84	L Scorgie				470		475
20	85	Inventories		892				892
24	86	P Hill				936		936
30	87	Inventories		950			95	1 045
31	88	Drawings			55			55
	89	Stationery			30		3	33



**I Van Bruggen
Sales journal**

Date 2010	Invoice no.	Accounts receivable	Post ref	Sales Cr \$	GST clearing Cr \$	Accounts receivable control Dr \$
Mar 4	24	B Ritchie		700	70	770
10	25	P Barry		400	40	440
25	26	E Sunco		960	96	1 056
29	27	B Ritchie		420	42	462
	28	R Allen		300	30	330

**I Van Bruggen
Cash receipts journal**

Date 2010	Rec no.	Particulars	Post ref	Sales Cr \$	Other Cr \$	Accounts receivable control Cr \$	GST clearing Cr \$	Bank Dr \$
Mar 1	CRS	Sales		600			60	660
4	101	R Allen				2 000		2 000
6	CRS	Sales		2 160			216	2 376
7	102	Rent revenue			420		42	
	CRS	Sales		400			40	902
12	103	E Sunco				900		900
14	104	P Barry				1 178		1 178
21	CRS	Sales		1 660			166	1 826
27	105	Motor vehicle			8 000		800	8 800
29	106	Capital			1 000			1 000

Cost of goods sold for March: \$6 092

★★★ 4.17 Subsidiary ledgers – trial balance

A trial balance for the business of V Nielson is as follows:

V Nielson Trial balance as at 31 August 2010		
	Debit \$	Credit \$
Sales		4 500
Sales returns and allowances	310	
Rent revenue		300
Electricity	320	
Wages	1 335	
Cash at bank	3 900	
D Barton	1 000	
M Geiger	2 100	
B Nadenic	604	
Inventories	4 819	
Land	9 145	
M Drager		900
Festo Pty Ltd		1 250
Mac Valves		183
Mortgage		9 000
Capital		7 520
Drawings	120	
	<u>\$25 553</u>	<u>\$25 553</u>

On 1 September, V Nielson changed the accounting system to include subsidiary ledgers for accounts receivable and accounts payable. Transactions for the month of September 2010 were as follows:

- Sept 1 Cash sales – \$600 plus GST
Sold M Geiger goods to the value of \$540 plus GST
Cash purchases of inventories – \$960 plus GST
- 2 D Barton forwarded a cheque for \$1 000 in settlement of account
- 3 Paid electricity account of \$200 plus GST
Received a cheque from M Geiger for \$2 100 in settlement of August account
Received a cheque for commission for \$440 (including GST)
- 5 Paid \$900 to M Drager in full settlement of account
Paid Festo Pty Ltd's account in full with a cheque for \$1 250
- 7 Purchased \$720 of goods from Mac Valves plus GST
Sold goods for \$250 to D Barton plus GST
- 10 Paid rates of \$600 (no GST)
Cash sales – \$890 plus GST
Cash purchases – \$400 GST-free
- 12 Sold B Nadenic \$600 of goods plus GST
- 15 Purchased inventories from M Drager – \$300 plus GST
Cash sales – \$900 plus GST
Cash purchases – \$890 plus GST
- 17 Received \$440 in rent revenue, including GST
- 20 Purchased goods from Festo Pty Ltd for \$740 plus GST
- 25 V Nielsen contributed \$5 000 to the business
- 30 B Nadenic paid outstanding account in full
Purchased goods from M Drager for \$1 060 plus GST

The cost of goods sold for the month of September totalled \$1 894.

You are required to:

- a** implement a subsidiary ledger system for accounts receivable and accounts payable
- b** post journal entries to the ledgers
- c** prepare schedules of accounts receivable and accounts payable
- d** take out a trial balance as at 30 September 2010.

★★★ 4.18 Checking for accuracy using subsidiary ledgers



- a** From which of the three ledgers (the general and the two subsidiary ledgers) is a trial balance prepared?
- b** Name the checking mechanisms that are in place when using the accounts receivable and accounts payable subsidiary ledgers.
- c** Why are the accounts receivable and accounts payable subsidiary ledgers not required for financial reporting purposes?
- d** It may appear that the subsidiary ledger system does not adhere to the double-entry principle because some transactions are posted twice to the same side of ledger accounts in the general and subsidiary ledgers. Explain how the application of double entry still applies.

★★ 4.19 Subsidiary ledgers



'When the concept of a control account is understood, the process to trial balance can be completed while the subsidiary ledgers are ignored.'

Write a paragraph outlining your reasons for agreeing or disagreeing with this statement.

★★ 4.20 Interest on account

Enter the transactions regarding interest on accounts in the general journal of J Masters.

- a** J Masters owes S Chandler \$258. Payment of this amount has been outstanding for over 30 days and S Chandler has advised of an interest charge of \$12 on 25 August 2010.
- b** L Chambers is an accounts payable with a balance of \$450. Interest of \$10 has been charged.
- c** On 3 September 2010, J Masters charged interest of \$8 on A Onzen's outstanding account of \$328.
- d** As at 5 September 2010, G Brady owes \$1 200. This amount has been outstanding for two months and interest of 10% per annum applies.

★ 4.21 Doubtful debts – financial reports

The ledger of Landmarc Products shows total net credit sales of \$321 700. It is estimated that 3% of net credit sales will be uncollectable.

Calculate the doubtful debts figure for the business of Landmarc Products. Record the necessary entry in the general journal for this amount and show the relevant extracts from the financial reports for this amount as at 30 June 2009.

★★ 4.22 Doubtful debts

An extract from the aged analysis of accounts receivable of D Marriott and past rates of unsuccessful collections is as follows:

Account status	Amount	Past uncollectable rate
	\$	%
Current	23 100	5
0–30 days	31 860	1
31–60 days	9 766	4
61–90 days	1 200	25
More than 4 months overdue	1 050	75

Calculate the provision for doubtful debts to the nearest dollar. Record the necessary entry in the general journal as at 30 June 2010.

★ 4.23 **Bad debts**

The following is an extract from the ledgers of A Ogilvie. Explain how the accounts of J Henderson and D Smith differ.

A Ogilvie General ledger (extract) – T-format					
Dr					Cr
Date	Part.	Amt. \$	Date	Part.	Amt. \$
2009			2009		
				Bad debts a/c	
Aug 7	J Henderson	230			
21	D Smith	138			
Accounts receivable ledger (extract)					
2009			2009		
				J Henderson	
Jul 1	Balance b/d	500	Aug 7	Bank	270
				Bad debts	230
				D Smith	
Jul 1	Balance b/d	138	Aug 21	Bad debts	138

A Ogilvie General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Bad debts a/c			
Aug 7	J Henderson	230		230 Dr
21	D Smith	138		368 Dr
Accounts receivable ledger (extract)				
2009				
	J Henderson			
Jul 1	Balance			500 Dr
Aug 7	Bank		270	230 Dr
	Bad debts		230	0
	D Smith			
Jul 1	Balance			138 Dr
21	Bad debts		138	0

★★ 4.24 **Estimating doubtful debts**

As the accountant for a small business with approximately 50 accounts receivable accounts, explain which method you would use to estimate doubtful debts.

★★ 4.25 **Doubtful debts**

Explain the effect on the profit figure in the financial reports in the following situations for a business that has not provided for doubtful debts. Assume the financial year is 1 July to 30 June and that GST is not applicable.

- On 16 February 2009, a credit sale of \$550 is made to L Maloney. On 24 September 2009, L Maloney's account is written off as a bad debt.
- A credit sale to the value of \$770 made on 7 January 2009 is written off as a bad debt on 18 May 2009.
- D Wilson's account of \$242 has been outstanding since 5 September 2009 when a credit sale was recorded. D Wilson's account is written off as a bad debt on 8 February 2010.
- Acorn Company's outstanding account of \$3 300 is written off on 28 July 2009. The credit sale was originally made to Acorn Company on 14 April 2009.

★★ 4.26 **Writing off bad debts**

Enter the following information in the books of M Kinross and post to the accounts receivable ledger. (Assume all amounts are GST-free.)

Accounts receivable balances as at 1 January 2009

	\$
R Kirkham	220
V McConnell	550
J Milton	330
S Orchard	860
G Pointing	770

2009

- | | |
|--------|---|
| Jan 24 | Received a cheque for \$330 from V McConnell's trustee as the final dividend for the account. The remainder of the account is to be written off as a bad debt |
| Mar 19 | R Kirkham advised that she was unable to pay her account. Write off the balance |
| May 28 | S Orchard forwarded a cheque for \$200 and advised M Kinross that his business was in bankruptcy |
| Jun 2 | J Milton's account is to be written off |
| Jun 12 | Received notification that G Pointing had been declared bankrupt. The account is to be written off |

★ 4.27 **Bad debts recovered**

On 1 June 2009, you were advised to write off \$220 (including GST) owed by G Pury. On 30 November 2009, G Pury sent a cheque for this outstanding amount.

- Complete all relevant journal entries.
- Post the journal entries to the ledger.

★ 4.28 **Bad debts recovered**

On 3 December 2009, \$10 000 (plus GST) was written off as bad debts. S Mayne owed \$1 540 of the value written off. You received a cheque from S Mayne on 4 April 2011 for half the amount he owed; this had previously been written off. The original value written off included 10% GST.

a Complete all relevant journal entries. **b** Post transactions to S Mayne's account.

★★ 4.29 **Recovery of bad debts**

The following accounts receivable of the business of N Noosan were written off as bad debts on 12 March 2010 (GST applies to all values written off as bad debts):

C Bellas	\$440
L Mares	\$528
M Milburn	\$462
K Rickland	\$517
H Tyland	\$297

Transactions:

3 May 2010	Received a cheque for \$297 from H Tyland
5 June 2010	As a result of the sale of M Milburn's assets, a cheque for \$165 was forwarded to N Noosan
19 July 2010	Received a cheque for \$528 from L Mares
1 September 2010	Received a cheque for \$275 from K Rickland's receivers
4 May 2011	Received a letter and cheque from C Bellas advising that he was able to pay creditors a dividend of 25c in the dollar

- a** Complete the relevant journal entries and post to the following accounts:
- bad debts and bad debts recovered in the general ledger
 - individual accounts in the accounts receivable ledger.
- b** Prepare income statement extracts for the relevant years.

★ 4.30 **Doubtful and bad debts**

As at 1 July 2010, the balance of the provision for doubtful debts account was \$4 200. The balance of the accounts receivable account on 30 June 2011 was \$102 000. Bad debts of \$8 800 to be written off on 30 June. The new provision for the doubtful debts account is to be \$3 000 more than last year.

You are required to prepare:

- a** necessary general journal entries (including closing entries)
b relevant general ledger accounts
c extracts from financial reports.

★★ 4.31 **Doubtful and bad debts**

The provision for doubtful debts is to be 3.5% of the accounts receivable balance.

Use the information given to prepare:

- a** general journal entries to record the provision for doubtful debts and closing entries
b relevant general ledger accounts
c extracts concerning bad debts and provision for doubtful debts from financial reports.

DY = During year.

G Isoardi General ledger – T-format					
Dr					Cr
Date	Part.	Amt. \$	Date	Part.	Amt. \$
2009/10			2009/10		
				Bad debts a/c	
DY	Accounts receivable control	4 000			
				Accounts receivable control a/c	
DY	Sales + GST	130 000	DY	Bank	83 500
			DY	Bad debts	4 000
				Provision for doubtful debts a/c	
			Jul 1	Balance b/d	1 200

G Isoardi General ledger – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009/10				
	Bad debts a/c			
DY	Accts. receivable control	4 000		4 000 Dr
	Accounts receivable control a/c			
DY	Sales + GST	130 000		130 000 Dr
	Bank		83 500	46 500 Dr
	Bad debts		4 000	42 500 Dr
	Provision for doubtful debts a/c			
Jul 1	Balance			1 200 Cr

★★ 4.32 Doubtful and bad debts

C Thompson commenced a new business on 2 February 2010. Credit sales to 30 June 2010 amounted to \$86 500, sales returns totalled \$1 200 (plus GST), and cash received from accounts receivables totalled \$62 000. Bad debts written off during this period amounted to \$5 000 (GST exclusive). Provision for doubtful debts is to be 3% of the accounts receivable balance. All amounts are exclusive of GST.

You are required to prepare:

- a** general journal entries to record the provision for doubtful debts
- b** relevant general ledger accounts (round figures to the nearest dollar).

★ 4.33 Provision for doubtful debts and bad debts

P Dwyer's ledger revealed the following information as at 30 June 2010:

The accounts receivable balance is \$16 375. Bad debts of \$480 have been written off. The provision for doubtful debts account showed a balance of \$270. The provision for doubtful debts is to be increased to 4.5% of the accounts receivable balance.

You are required to prepare:

- a** general journal entries to record the provision for doubtful debts
- b** relevant general ledger accounts.

★ 4.34 Doubtful and bad debts

On 30 June 2010, the balance of the accounts receivable control account in the ledger of H O'Sullivan was \$740 000. Bad debts written off during the year amounted to \$8 200 and the provision made for bad debts had been \$4 800. It is estimated that 1.5% of accounts receivable will be uncollectable.

You are required to prepare:

- a** general journal entries to record provision for doubtful debts
- b** relevant general ledger accounts.

★ 4.35 Doubtful and bad debts

A Maxwell commenced a new business on 5 March 2009. Credit sales during this period amounted to \$88 000. Bad debts written off amounted to \$1 500. Cash received from accounts receivable totalled \$63 200. A Maxwell anticipates that \$800 of the current accounting period's accounts receivable will not be collected.

You are required to prepare:

- a** general journal entries
- b** relevant general ledger accounts.

★★ 4.36 Provision for doubtful debts and bad debts

The following schedule was prepared from the accounts receivable subsidiary ledger of K Davis:

Schedule of accounts receivable as at 30 June 2010		\$
A Atkins		2 500
K Forbes		900
B Hammond		1 133
K Varga		3 290
		<hr/>
		7 823

Credit sales during the year amounted to \$61 237 and bad debts written off totalled \$4 390 (plus GST). A provision for doubtful debts of \$2 149 had been allowed. Cash received from accounts receivable totalled \$49 110. B Hammond's account has been outstanding for four months and K Davis believes this debt is doubtful. (GST applies.)

You are required to prepare:

- a** general journal entries to account for the provision for doubtful debts and bad debts
- b** relevant ledger accounts in the general ledger.

★★ 4.37 Doubtful and bad debts

The following information was extracted from the ledgers of K Hession on 30 June 2010:

	\$
Accounts receivable control (net)	68 000
Bad debts	2 000
Provision for doubtful debts	800

The aged analysis of accounts receivable showed that accounts had been outstanding as follows:

Current	50%
30 days overdue	21%
60 days overdue	18%
90 days overdue	7%
Over 90 days	4%

K Hession believes that accounts which are 90 days or more overdue will not be collected.

You are required to prepare the relevant:

- a** general journal entries
- b** ledger accounts in general ledger.

All values are GST-free.

★ 4.38 Doubtful and bad debts

K Norman's general ledger showed the following information:

The balance of the provision for doubtful debts account as at 1 July 2009 is \$900. During the year, \$500 of bad debts were written off. The accounts receivable control account balance as at 1 July 2010 is \$36 800. The new provision for doubtful debts is to be 4% of the accounts receivable control account balance. (GST applies.)

You are required to prepare the relevant:

- a** general journal entries
- b** ledger accounts in the general ledger
- c** extracts from financial reports.

★ 4.39 Doubtful and bad debts

The following information was extracted from the ledger of M Toorak. The balance of the provision for the doubtful debts account as at 1 July 2010 is \$3 000. During the year, \$2 700 of bad debts were written off. The accounts receivable control account balance as at 1 July 2011 is \$42 600. The new provision for doubtful debts is to be \$1 000 less than last year. (GST applies.)

You are required to prepare:

- a** general journal entries
- b** ledger accounts in the general ledger.

★★★ 4.40 Decision-making – bad debts

You are the accountant for Caring Computers, a business employing six sales representatives, an accounts receivable clerk (full-time on a salary of \$21 000 per annum) and an accounts payable clerk (part-time on a salary of \$10 000 per annum). The accounts receivable clerk is responsible for debt collection. Bad debts for the business were 10% of accounts receivable in 2009 and 12% of accounts receivable in 2010. It is expected that the trend of a 2% increase in bad debts per annum will continue in the foreseeable future. Accounts receivable figures for the last three years are as follows (GST applies):

2009	2010	2011
\$125 000	\$140 000	\$150 000

The following is a standard letter Caring Computers currently sends to accounts receivables who have been overdue for two weeks:

Dear _____
 Examination of your account reveals that you have failed to pay an amount owing of \$ _____.
 We regret to advise that unless payment is received from you within 48 hours, this matter will be handed over to our solicitor.
 Yours faithfully

Now read the following article.

Credit management

Many firms find that in time they have developed a large receivables base. To deal with this problem, firms often employ the services of a debt collection agency. However, debt collection usually falls on the shoulders of the owners in smaller organisations.

There are problems associated with both these options. Debt collection agencies often are not sensitive to particular customer needs or circumstances, whereas the owners are often reluctant to ask for payments in the belief they may upset their customers.

Outsourcing can be an option, particularly for non-

core business activities. This can be cost-effective if the company takes precautions.

If the outsourcing is 'managed' by the company through having a specialist operator, regular reporting, and personnel with the ability to negotiate in often difficult situations, this method can be effective. Regular updates through the provision of an aged list of debtors provided by the company is essential. This provides the agency with accurate information.

This procedure can be beneficial for all involved, including customer relations and cash flow.

Additional information:

After making enquiries at Spectrum Credit Services Ltd, you have been advised that a fee of \$5 000 per annum would be payable for a debt collection service for your business.

a Explain the following terms from the article:

- | | |
|---|--------------------------------|
| i large receivables base | iv cost-effective |
| ii outsourcing | v aged list of debtors. |
| iii non-core business activities | |

b Write a report to J Wheatley, the owner of Caring Computers, outlining your recommendations for an improvement in the present system of debt collection. The report must include the reasons for your recommendations.

★★★ 4.41 Complete credit transactions



John Ringlestein began his delivery service business on 18 May 2009. The business is trading under the name Quick as a Flash. John intends to offer credit terms. His transactions for the first two months were:

May	18	John deposited \$12 000 cash as capital into the business's bank account		
	20	John purchased on credit from Direct Suppliers Ltd the following assets on order no. 1:		
		Item no.	Description	Price
		001	Two office desks	990
		002	Motor vehicle	16 500
	23	Credit deliveries to C Hauff on order no. 621 for \$800 plus GST		
	26	Paid Direct Suppliers Ltd in settlement of account		
	28	Credit deliveries to R Bowman on order 8887 for \$1 000 plus GST		
Jun	3	Credit deliveries to Palethorpe Enterprises on order no. 9984 \$500 plus GST		
	8	Purchased printing and stationery from SOS Ltd for \$1 200 plus GST		



- 11 Received a part payment from R Bowman of \$300 (cheque no. 44332 ANZ Bank).
- 14 Credit deliveries to P Hodgetts on order no. 02230 for \$970 plus GST
- 18 Purchased office supplies from Palethorpe Enterprises for \$1 690 plus GST
- 21 Received cash from C Hauff in settlement of account
- 24 Our bank notified us that cheque no. 44332 deposited by us on 11 June has been returned marked 'insufficient funds'. We were notified that the bank fee for this transaction is \$22 and this was to be debited to our account. Record this fee in our cash account and then transfer to the debtors account
- 25 Received a part payment of \$200 from P Hodgetts. Cheque no. 874904
- 27 Paid Palethorpe Enterprises the outstanding debt
- 30 Received notification that R Bowman has been declared a bankrupt. Write off this account as a bad debt

You are required to:

- a** enter the transactions above into a computerised accounting system
- b** prepare an analysis of accounts receivable and accounts payable at the end of June
- c** prepare an income statement and balance sheet for John Ringlestein's business at the end of June
- d** At the conclusion of this process, write a report on the financial information you were able to ascertain from the exercise.

RC3

Inventories

Perpetual and periodic inventory systems

- Nature of inventories
- Inventory accounting methods
- Inventory records (stock cards)
- Inventory costing methods
- Weighted average costing method
- Analysing inventory records (stock cards)
- First-in-first-out (FIFO)
- Lower of cost and net realisable value

Chapter

5

Perpetual and periodic inventory systems

Already know

- How to account for inventories using a perpetual inventory system

Need to know

- Inventories:
 - consideration of perpetual and periodic inventory systems
 - preparation of stock cards using inventory costing methods (FIFO and weighted average) and incorporating returns and inventory adjustments
 - journal entry to record discrepancies in inventories
 - application of 'lower of cost and net realisable value' rule

Using the knowledge

- *Provides information for decision-making on stock levels, discrepancies and values. Management also uses this information to identify those items that are slow moving or popular.*
- *Assists in discharging accountability by accounting for the asset, 'inventories', and assessing its value*

ACCOUNTING VOCABULARY

FIFO method

Inventory records

Lower of cost and net realisable value

Periodic system

Perpetual system

Weighted average method

Learning objectives

After completing this section, you should be able to:

- 1 understand the nature of inventories
- 2 understand the two inventory accounting methods
- 3 complete inventory records (stock cards)
- 4 state the inventory costing methods
- 5 complete inventory records using perpetual and periodic inventory systems
- 6 analyse the inventory records (stock cards) using weighted average
- 7 complete inventory records (stock cards) using first-in-first-out (FIFO)
- 8 compare the weighted average and FIFO methods of costing inventories
- 9 apply the 'lower of cost and net realisable value' rule.

Nature of inventories

Learning objective 1

Inventories are, by their nature, different things to different businesses. 'Trading stock', 'goods', 'merchandise' and 'raw materials' are all names given to inventories, and some of these terms are interchangeable.



Inventories are items held by the business that are intended for sale in the normal operations of the business.

AASB 1019 defines inventories in a more detailed way. The standard is applied to many different types of inventories in manufacturing and trading businesses. It defines inventories as goods, other property and services:

- held for the purpose of sale in the ordinary course of operations
- in the process of production for such sale, often called 'work-in-process' or 'work-in-progress' in manufacturing industries (e.g. material cut but not yet a finished good)
- to be used in the production of goods, other property or services for sale, including consumable stores and supplies (e.g. thread used in producing clothes).

The first of these is a finished item ready for sale. The second and third can refer to a manufacturing enterprise where partly completed goods and/or raw materials form part of the inventories.

Review & practice

1

List three or four items that would constitute inventories for the following types of businesses:

- | | | |
|---------------------|--------------------------|-----------------------|
| a plumbing | d florist | f optometrist |
| b hotel | e service station | g pastoralist. |
| c newsagency | | |

► Exercises 5.1 and 5.2, page 330

Inventory accounting methods

Learning objective 2

It is common for school canteens to use the periodic system of accounting for inventories.

A business has the choice of two inventory systems – periodic or perpetual. This text has used the perpetual method of accounting for inventories in the journals and ledgers to this point. With the growth in computer usage in the business environment, the perpetual system has grown in popularity because software packages allow for the easy storage of the additional information required under this system. However, the periodic inventory system is still of value, particularly when dealing with inexpensive goods.

In contrast to the perpetual system, the **periodic inventory system** does not keep a running balance of inventories. From time to time (periodically), a physical stocktake is conducted, and this information is incorporated into the accounting records. This usually happens at the end of each quarter of the financial year. Some small businesses may conduct a stocktake only on an annual basis.



The **periodic inventory system** is a method of accounting for inventories that requires a physical stock count whenever the value of the closing inventories is required.

This method calculates the cost of goods sold only when financial reports are prepared.

The periodic accounting method uses the following accounts: sales, purchases, returns and inventory. Cost of goods sold is not recorded as a ledger account and is calculated at the time reports are completed. The principal accounts that are affected by inventories in the periodic method are described in [5.1].

[5.1]

General ledger accounts in the periodic method	Information recorded in account
Sales a/c	Retail price of inventory sold
Sales returns a/c	Retail price of inventory returned
Purchase a/c	Cost price of inventories purchased
Purchases returns a/c	Cost price of inventories returned
Cartage inwards a/c	Transport cost to location of sale
Customs duty a/c	Government tax on imported goods
Inventory control a/c	The value of inventory held by business

The **perpetual inventory system** does not rely on a physical count of inventory items. It keeps a continuous (perpetual) record of all items purchased and sold. Because all purchases are recorded at the cost price, and all sales are recorded at both the selling price and the cost price, the closing inventory value is always available in the accounting records.



The **perpetual inventory system** is a method of accounting for inventories that keeps a continuous record of all inventories purchased and sold.

The records kept in a perpetual inventory system include both the cost price and the selling price of inventories.

From time to time a stocktake is still taken under the perpetual system. Its purpose is to identify any discrepancies between what inventories are actually held by the business and what inventories should be held by the business according to the records.

A comparison of the two systems of recording inventories in the journals and financial reports is illustrated in [5.2].

[5.2]

Perpetual system	Periodic system
1 Credit purchases of \$550 000 from P Smith Inventory control Dr 500 000 GST clearing Dr 50 000 Accounts payable control – P Smith Cr 550 000	1 Credit purchases of \$550 000 from P Smith Purchases Dr 500 000 GST clearing Dr 50 000 Accounts payable control – P Smith Cr 550 000
2 Cartage on purchase of \$500 from B Tome Cost of goods sold Dr 500 GST clearing Dr 50 Accounts payable control – B Tome Cr 550	2 Cartage on purchase of \$500 from B Tome Cartage inwards Dr 500 GST clearing Dr 50 Accounts payable control – B Tome Cr 550
3 Credit sales of \$935 000 (cost \$456 000) to P Gordon Accounts receivable control – P Gordon Dr 935 000 GST clearing Cr 85 000 Sales revenue Cr 850 000 Cost of goods sold Dr 456 000 Inventory control Cr 456 000 Inventory adjustment Dr 4 500 Inventory control Cr 4 500	3 Credit sales of \$935 000 to P Gordon Accounts receivable control – P Gordon Dr 935 000 GST clearing Cr 85 000 Sales revenue Cr 850 000

A shortage or surplus could occur when inventory records and stocktake figures are compared. The most likely case is a shortage due to theft, pilfering or spoilage (see page 323).

Selling price →

Cost price →



Inventory adjustments are discussed later in this chapter.

4 End-of-period entries	4 End-of-period entries to update inventories and record cost of goods sold
a Transfer cost of goods sold Profit and loss summary Dr 460 500 Cost of goods sold Cr 456 000 Inventory adjust. Cr 4 500	a Transfer opening inventories (100 000) Profit and loss summary Dr 100 000 Inventory (opening balance) Cr 100 000 b Record closing inventories (140 000) Inventory (closing balance) Dr 140 000 Profit and loss summary Cr 140 000 c Transfer purchases Profit and loss summary Dr 500 000 Purchases Cr 500 000 d Transfer cartage inwards Profit and loss summary Dr 500 Cartage inwards Cr 500 e Transfer sales Sales Dr 850 000 Profit and loss summary Cr 850 000
5 Inventories in financial reports	5 Inventories in financial reports
Income statement (extract) for the period ... Sales revenue 850 000 Less Cost of goods sold 456 000 Inventory adjustment 4 500 460 500 Gross profit	Income statement (extract) for the period ... Sales revenue 850 000 Less Cost of goods sold Opening inventory 100 000 389 500 Purchases 500 000 Cartage inwards 500 Cost of goods available for sale 600 500 Less Closing inventory (140 000) Cost of goods sold 460 500 Gross profit 389 500
Balance sheet (extract) as at ... Assets Inventory control 140 000	Balance sheet (extract) as at ... Assets Inventory 140 000

As illustrated in [5.2], the perpetual system keeps a continuous record of the inventory value and the value of the cost of all the goods sold. In the periodic system, closing inventory is obtained from a physical stocktake and the cost of the goods sold is a calculated value.

Figure [5.3] focuses on how the number of inventory items on hand is calculated under the periodic system of accounting for inventories.

[5.3]**Inventories**

→ → → → → → →

→ → →

→ → → → → → → → → →

→ → → →

→ → → → → →

Opening inventories

+ Purchases

= Goods available for sale

– Goods sold

= Closing inventories

Inventories on hand

7

3

10

46

The business started with seven planes and purchased three, which gave it ten it could sell. Four were sold. Therefore, when the business performed a stocktake it should have had six planes in stock.

Review & practice 2

- Do the perpetual and periodic inventory systems report the same level of gross profit and cost of goods sold? Explain how you arrived at your answer.
- Using the periodic method of accounting for inventories, complete the closing entries required and calculate the gross profit as at 30 June 2010 in an income statement format.

	\$
Sales	1 760 000
Sales returns	1 980
Purchases	980 000
Customs duty	6 600
Inventory 1/7/2009	850 213
Inventory 30/06/2010	760 560
Purchases returns	3 190

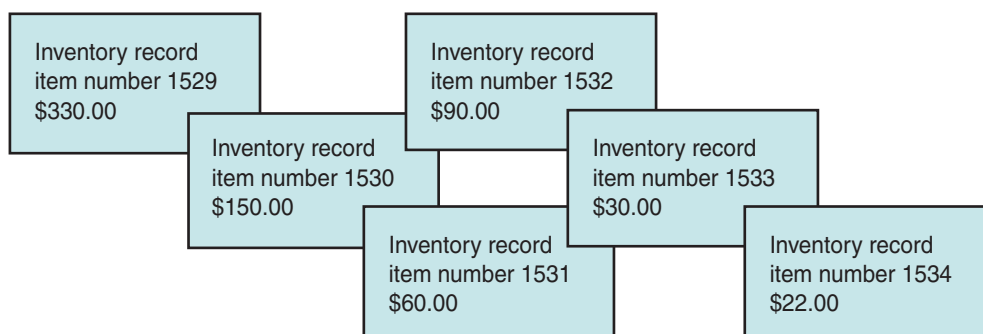
► Exercises 5.3 to 5.5, page 331

Inventory records (stock cards)

Learning objective 3

Inventory records are also called stock cards.

As the perpetual system keeps a continuous record of the quantity and value of inventories, the issue is how this is achieved. An illustration of an inventory record system will give some insight into the process of keeping continuous inventory quantities and values. Under the perpetual inventory system, an individual record (**inventory record or stock card**) must be kept for each item of stock **[5.4]**.

[5.4]



An **inventory record (stock card)** is a record of every movement of stock in and out of a business for a particular stock item. It is recorded at cost price.

The inventories account is now called the inventory control account in the general ledger and shows the sum total of the individual balances from the stock cards. This figure is used in the accounting records and financial reports. In [5.4], the total of the inventory cost is:

$$\$330 + \$150 + \$60 + \$90 + \$30 + \$22 = \$682$$

The cost price in relation to inventories is the total of purchase price, transportation to location of sale, customs duties and taxes prior to sale, plus any other costs incurred in getting the goods to their present location and in a condition ready for sale.

Figure [5.5] contains one inventory record for item number 1529. All other inventory records would follow the same format.

[5.5]

Inventory record										
Item number:		1529			Reorder point:			50–60		
Item description:		Woks			Reorder quantity:			10–20		
Location:		Kelvin Grove Warehouse								
		In			Out			Total units on hand		
Date	Particulars	Qty	Unit cost	Total cost*	Qty	Unit cost	Total cost*	Qty	Unit cost	Total cost*
2009										
July 1	Balance							51	5.00	255.00
3	Purchases	10	5.00	50.00				61	5.00	305.00
4	Sales at cost				5	5.00	25.00	56	5.00	280.00
5	Purchases	15	5.00	75.00				71	5.00	355.00
6	Purchases returns				5	5.00	25.00	66	5.00	330.00
* Qty x Unit cost = Total cost										
<div><div>↑ +</div><div>↑ –</div></div>										

✓ Helpful hints

- Units purchased add to the total units on hand.
- Units sold subtract from the total units on hand.
- Total cost is the quantity multiplied by the unit cost.
- All unit costs are at cost price (\$5 in this inventory record).
- A separate inventory record is required for each inventory item.
- All inventory costs are net of GST.

In [5.5], all unit costs are the same value (\$5). In reality, the unit cost is likely to change over time. This is due to factors such as:

- discount periods, which decrease the purchase price
- a rise in material costs
- inflation, which increases costs
- a rise in wages/salaries.

Therefore, differing unit costs will be incorporated into the recording system.

All inventory values are at cost price net of GST.

Inventory costing methods

Learning objective 4

The most common inventory costing methods used internationally are:

- | | |
|------------------------------------|-----------------------------------|
| 1 weighted average | 4 last-in-first-out (LIFO) |
| 2 first-in-first-out (FIFO) | 5 standard cost. |
| 3 specific unit cost | |

The valuation method chosen for inventory must give the 'fairest practicable reflection of the reality of the situation'. This is an application of the accounting assumptions of comparability and reliability.

In choosing a method for assigning costs to inventories, there are two important requirements. The costing method must be:

- appropriate for the type of inventories
- applied consistently across accounting periods.

Two inventory costing methods will be studied in this text: weighted average and first-in-first-out (FIFO). Weighted average cost is most suitable when it is impractical or impossible to distinguish the cost of one item of inventory purchased or sold from another. First-in-first-out (FIFO) assumes that the oldest inventories are sold first.



Weighted average costing method

Learning objective 5

As the **weighted average** cost method is most suitable when it is impractical or impossible to distinguish the cost between quantities purchased, it could be used when costing inventories such as litres of petrol at a service station.



Weighted average costing is a method of assigning the total costs of inventory equally among the total of all like units.

Although inventory records may be completed manually, most computerised accounting systems use the weighted average cost method to determine the cost price of goods sold. The use of spreadsheets is ideal in the process of calculating the weighted average unit cost. Figure [5.6] illustrates the calculation of weighted average cost when there is inventory on hand and purchases are made.

All spreadsheet applications can also be completed manually.

[5.6]

Inventory record										
Item number: 1529			Costing method: weighted average							
		In			Out			Total units on hand		
Date	Particulars	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost
6-Jul-09	Balance							66	5.00000	330.00
7-Jul-09	Purchases	4	6.00000	24.00				70	5.05714	354.00
8-Jul-09	Purchases	10	6.50000	65.00				80	5.23750	419.00

In the total units on hand section, the weighted average unit cost is calculated by adding together the total cost to date prior to the current purchases and the total cost of the purchases. The result is divided by the total quantity on hand prior to the current purchases plus the quantity purchased on the current date. For the purchases made on 8 July, the same process is followed.

The *weighted average* cost is not the same as the *average cost*. In [5.6], the *weighted average* cost of goods is 5.23750. The *average cost* of these goods would be the three different unit costs divided by the number of times the unit cost has changed ($[\$5 + \$6 + \$6.5] \div 3 = 5.83333$).

When a sale is made, total units held will decrease. Figure [5.7] illustrates the weighted average inventory record for purchases, sales, returns and inventory adjustments.

As weighted average always provides the cost price for goods sold, the unit cost in the *Out* section is the current weighted average unit cost in the *Total units on hand* at that time. The only time the unit cost in the *Out* section differs from the current weighted average calculation is when a purchase return occurs.

Always round inventory cost calculations to five decimal places.



Returns

With purchases returns, the item/s returned is/are identified and the purchase price paid is the amount recorded in the unit cost in the *Out* section. In [5.7], the items returned by the firm were bought on 15 July, so the purchase price is \$7. This \$7 value is then used in the unit cost column of the *Out* section. Therefore, the weighted average of the unit cost in the *Total units on hand* section needs to be recalculated and adjusted accordingly.

Sales returns are recorded in the *In* column at the original cost price of the goods when they were sold. Therefore, a new weighted average unit cost may need to be calculated, depending on when the original sale was made.

[5.7]

Inventory record

Item number		1529 Costing method: weighted average								
		In			Out			Total units on hand		
Date	Particulars	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost
6-Jul-09	Balance							66	5.00000	330.00
7-Jul-09	Purchases	4	6.00000	24.00				70	5.05714	354.00
8-Jul-09	Purchases	10	6.50000	65.00				80	5.23750	419.00
9-Jul-09	Sales at cost				10	5.23750	52.38	70	5.23750	366.63
10-Jul-09	Sales at cost				5	5.23750	26.19	65	5.23750	340.44
15-Jul-09	Purchases	20	7.00000	140.00				85	5.65224	480.44
21-Jul-09	Sales at cost				15	5.65224	84.78	70	5.65224	395.65
26-Jul-09	Sales at cost				5	5.65224	28.26	65	5.65224	367.39
27-Jul-09	Purchases returns				5	7.00000	35.00	60	5.53983	332.39
28-Jul-09	Sales at cost				10	5.53983	55.40	50	5.53983	276.99
28-Jul-09	Sales returns at cost	8	5.53983	44.32				58	5.53983	321.31
30-Jul-09	Inventory adjustment				2	5.53983	11.08	56	5.53983	310.23

Inventory records can also be completed using spreadsheets. Slight differences due to rounding are experienced when using a calculator.

Inventory adjustment is explained on page 323.

The unit cost of returned goods (sale or purchase) is the same as the unit cost of the original sale or purchase. Refer to the date on which the goods were sold or purchased to find the cost price of the returns. If no date is given, assume the last sale or purchase made.



Physical stocktake

The last entry in [5.7] is an inventory adjustment entry. At set intervals, a stocktake is undertaken where staff physically count the inventory on hand. Any physical stocktake is open to human error. However, there are procedures that can be introduced to limit the errors and create an efficient and effective stocktake. They include the following:

- Stocks need to be arranged in like items for convenient counting.
- Stock sheets with a list of the names of the stock items to be counted should be prepared prior to the stocktake to facilitate easy counting.
- Detailed instructions need to be provided for those who will be performing the actual count of stock.
- Adequate supervision is required to ensure errors are minimised.
- Counts of some items are spot-checked by supervisors to ensure accuracy.
- Attention to movements of stock just before or after the stocktake is important. A cutoff point is established after which stock is frozen.

The accuracy of the stocktake is very important. For some large organisations, an auditor will be present at the annual stocktake to observe procedures, effectiveness and accuracy. A small business owner may complete a regular monthly stocktake if the stock is of a type that can be counted in a couple of hours. The manager ensures not only good control over the stocktake, but is able to monitor inventory levels. Any deterioration in stock or poor storage conditions contributing to spoilage can be addressed at the same time.

Stocktaking involves a considerable time commitment for a large business. The major cost involved in a stocktake is wages, which often have to be paid at overtime rates. Trading within the business may be suspended for a short period, causing some disruption in trading and possible loss of sales during this time.

Inventory adjustments

Any discrepancy between the number of units identified through a physical stocktake and the number of units recorded in the inventory records is reflected through an inventory adjustment entry in the general journal. The perpetual inventory system enables stock discrepancies to be revealed. Because the system keeps track of how much inventory should be on hand, it can be compared with how much is actually on hand.

The inventory records must be adjusted to reflect the current physical stocktake figures. Any inventory shortage is recorded in the *Out* section and any surplus is recorded in the *In* section of the inventory records (stock cards). The unit price for both these situations (shortage and surplus) is the current unit cost in the *Total units on hand* section.

A general journal entry must also record the discrepancy so that the inventory control account is updated and reflects the balance shown in the inventory records (stock cards). This entry is recorded after a stocktake (monthly or annually).

A **shortage** is recorded in the general journal as:

Jul 31	Inventory adjustment	Dr	xx.xx	
	Inventory control	Cr		xx.xx
	(Discrepancy in inventory records)			

A **surplus** would be recorded in the general journal as:

Jul 31	Inventory control	Dr	xx.xx	
	Inventory adjustment	Cr		xx.xx
	(Discrepancy in inventory records)			

Review & practice 3

- a** Complete the inventory record for item 6231 for S Biggs using the weighted average costing method and the information below. This can be completed manually in a worksheet format or electronically in a spreadsheet application. Assume the inventory purchased and sold is item 6231 only. All figures provided are net of GST.

Jan 1	Balance in the inventories control account \$200. This was reflected in the stocktake carried out on 31 December 2010, which revealed 100 units valued at \$2 each
2	Inventory purchase of 100 units at \$4 per unit
6	Sold inventories: 150
8	Inventory purchase 200 units at \$2 per unit
14	Sold inventories: 100 units
21	Returned goods purchased on 8 January – 50 units
23	Purchased 150 units at \$3 per unit
28	Goods sold on 14 January were returned – 50 units
29	Sold inventories: 60 units

Additional information:

Jan 31 A stocktake on 31 January revealed 220 units of stock item 6231

It is assumed that returned goods are received in good condition and are acceptable for resale, and that S Biggs buys and sells on credit.

- b** Prepare a general journal entry to record any discrepancy in the inventory records.
- c** Explain the difference between a weighted average costing method for inventory and an average costing method. Develop a well-structured paragraph for your response.

► Exercises 5.6 to 5.10, pages 331–2

Analysing inventory records (stock cards)

Learning objective 6

To understand the connection between the inventory records (stock cards) and the accounting records, an analysis of the columns in the inventory record is required. Consider the inventory record, the explanation and the journal entries shown in [5.8]. Assume all purchases and sales are made on credit.

✓ Helpful hints

- Items from the *In* column are always '*Inventory Control Dr*'.
- Items from the *Out* column are always '*Inventory Control Cr*'.
- All *sales* items are at *cost*. No record is kept in the inventory records (stock cards) of the selling price of inventories sold.
- All figures are net of GST in the inventory record (stock card).

[5.8]

Inventory record										
Item number		1529		Costing method: weighted average						
		In			Out			Total units on hand		
Date	Particulars	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost
6-Jul-09	Balance							66	5.00000	330.00
7-Jul-09	Purchases	4	6.00000	24.00				70	5.05714	354.00
8-Jul-09	Purchases	10	6.50000	65.00				80	5.23750	419.00
9-Jul-09	Sales at cost				10	5.23750	52.38	70	5.23750	366.63
10-Jul-09	Sales at cost				5	5.23750	26.19	65	5.23750	340.44
15-Jul-09	Purchases	20	7.00000	140.00				85	5.65224	480.44
21-Jul-09	Sales at cost				15	5.65224	84.78	70	5.65224	395.65
26-Jul-09	Sales at cost				5	5.65224	28.26	65	5.65224	367.39
27-Jul-09	Purchase returns				5	7.00000	35.00	60	5.53983	332.39
28-Jul-09	Sales at cost				10	5.53983	55.40	50	5.53983	276.99
28-Jul-09	Sales returns at cost	8	5.53983	44.32				58	5.53983	321.31
30-Jul-09	Inventory adjustment				2	5.53983	11.08	56	5.53983	310.23

For purchases from this column		For sales from this column		For closing inventory
Inventory control	Dr	Cost of goods sold	Dr	The final value should equal the inventory control account balance
GST clearing	Dr	Inventory control	Cr	
Accounts payable	Cr			
For sales returns from this column		For purchases returns from this column		
Inventory control	Dr	Accounts payable	Dr	
Cost of goods sold	Cr	GST clearing	Cr	
		Inventory control	Cr	
For inventory adjustment from this column (surplus)		For inventory adjustment from this column (shortage)		
Inventory control	Dr	Inventory adjustment	Dr	
Inventory adjustment	Cr	Inventory control	Cr	

First-in-first-out (FIFO)

Learning objective 7 The second costing method of inventory valuation to be addressed in this chapter is first-in-first-out (FIFO).

The **FIFO** method of costing is used for any type of suitable inventories, especially where individual inventory items are not easily identifiable, such as the nails used by a fencing contractor, or barrels of mixed lollies for a confectionery wholesaler.



The **FIFO method** of costing inventories is based on the assumption that the oldest inventories are sold first.

A service station, for example, purchases spare parts for repairing cars. When a part is used in a repair, the cost associated with the part is the cost assigned to the oldest part on hand.

It is important to note that this is purely a costing method for inventories. It does not mean that the mechanic actually uses the particular part that is the oldest (although this would be the case in some enterprises), but that the cost assigned to the part used is the cost of the oldest inventory on record.

Recall that the objective of costing inventories is to value them at a cost that gives the 'fairest practicable reflection of the reality of the situation'.

EXAMPLE 1

FIFO

All transactions for Lynch Incorporated are shown as net of GST for January 2010.

- Jan 1 Balance in the inventories control account – \$200. This was reflected in the stocktake carried out on 31 December 2010, which revealed 100 units valued at \$2 each.
- 2 Inventory purchase of 100 units at \$4 per unit
- 6 Sold inventories: 150
- 8 Inventory purchase 200 units at \$2 per unit
- 14 Sold inventories: 100 units
- 21 Returned goods purchased on 8 January – 50 units
- 23 Purchased 150 units at \$3 per unit
- 28 Goods sold on 14 January were returned – 50 units
- 29 Sold inventories: 60 units

Additional information:

- Jan 31 A stocktake on 31 January revealed 220 units in stock.

FIFO
Rule for sales
returns: First out,
stay out. Therefore,
bring back at last
cost price.

Inventory records (Perpetual inventory method)

Item number		1529			Costing method: FIFO					
		In			Out			Total units on hand		
Date	Particulars	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost	Qty	Unit cost	Total cost
Jan 1	Balance							100	2.00	200.00
2	Purchase	100	4.00	400.00				100	2.00	200.00
								100	4.00	400.00
6	Sales at cost price				100	2.00	200.00			
					50	4.00	200.00	50	4.00	200.00
8	Purchase	200	2.00	400.00				50	4.00	200.00
								200	2.00	400.00
14	Sales at cost price				50	4.00	200.00			
					50	2.00	100.00	150	2.00	300.00
21	Purchase returns				50	2.00	100.00	100	2.00	200.00
23	Purchase	150	3.00	450.00				100	2.00	200.00
								150	3.00	450.00
28	Sales returns at cost price	50	2.00	100.00				150	2.00	300.00
								150	3.00	450.00
29	Sales at cost price				60	2.00	120.00	90	2.00	180.00
								150	3.00	450.00
31	Inventory adjustment (shortage)				20	2.00	40.00	70	2.00	140.00
								150	3.00	450.00



Notes on inventory record (stock card)

- 1** When additional units are purchased, repeat the previous quantity, unit cost and total cost, and the new purchase quantity, unit cost and total cost in the *Total units on hand* columns. A line is then drawn beneath the last entry.
- 2** Sales on 6 January are assumed to be made at the oldest price/s first (first in, then the first out). In this example, the 150 items sold are made up of 100 items at \$2 and 50 items at \$4, leaving 50 items at \$4 in the *Total units on hand* column.
- 3** Sales on 14 January are assumed to be made at \$4 for the first 50 items and \$2 for the next 50. This leaves 150 items at \$2 in the *Total units on hand* column.
- 4** The cost of the inventories being returned on 21 January can be identified. The goods were purchased on 8 January at a cost of \$2 each. When the goods go back out of stock, they do so at the original cost price.
- 5** Items previously sold are sometimes returned and put back into stock. If there are two costs for the goods sold on a particular date, then the second of these costs is used to value returns – i.e. first out, stay out!

Review & practice

4

- a** From the following data, prepare a stock card using FIFO as the costing method and a general journal entry for any discrepancy.

Aug 1 Balance of 425 units @ \$7.00 each

Purchases

Aug 3	541 units @ \$6.00 each	Aug 7	500 units
10	624 units @ \$5.00 each	14	650 units
25	750 units @ \$7.00 each	29	500 units

Sales

A stocktake on 31 August revealed 650 units in stock. All values are net of GST.

- b** From the following data, prepare a stock card using the FIFO costing method and a general journal entry for any discrepancy.

Balance

Sep 1 Balance of 650 units @ \$7.00 each

Purchases

Sep 4	500 units @ \$7.00
9	720 units @ \$8.00
14	900 units @ \$6.00

Purchases returns

Sep 8	100 units @ \$7.00
-------	--------------------

Sales

Sep 2	300 units
9	560 units
16	400 units
26	600 units

Sales returns

Sep 20	90 units sold on 16 Sep
--------	-------------------------

Stocktake

Sep 30	Stocktake revealed 1 000 units in stock
--------	---

All values are net of GST.

Lower of cost and net realisable value

Learning objective 9

From the two methods of valuing inventories considered in this text, it is apparent that the value of inventories reported depends on the valuation method used. The accounting standard relating to inventories stipulates that the value of inventories used in reports is to be **cost** or **net realisable value**, whichever is lower. Cost in this instance reflects historical cost (the price of the inventory at the time of purchase).



Net realisable value is the estimated proceeds of sale less, where applicable, all further costs to the stage of completion and less all costs to be incurred in marketing, selling and distribution to customers.

Therefore, the net realisable value (NRV) of inventories could be lower than their historical cost. Consider the following situations to illustrate this point.

- Goods are no longer in their peak condition due to physical deterioration or damage.
- Goods have become obsolete, out-of-date or unfashionable.
- Goods are made unsaleable by new government regulations (such as dangerous toys).
- Demand has fallen for the goods.
- Excess supply has created a decline in the selling price (market price).
- Management adopts a marketing ploy to sell at a loss and increase its market share (loss leader).

In each of these circumstances, the net realisable value of the inventories may be lower than their historical cost. This leads to the need for some means of calculating the value of inventories so that an appropriate valuation can appear in the financial reports.

As calculating the net realisable value of inventories involves some degree of estimation, there is a subjective element in this process. When assigning NRV, all inventories can be assessed on a line-by-line basis. Table [5.9] shows one method of organising the information so that the value can be determined.

[5.9]

Inventory item	Qty	Unit cost	Total cost	NRV cost per unit	Total NRV	Reporting value – lower of cost and NRV
Model 3450	10	120	1 200	125	1 250	1 200
Model 3465	6	150	900	120	720	720
Model 3499	8	95	760	100	800	760
Model 3467	12	80	960	76	912	912
Inventory value			3 820		3 682	3 592

Each item in the *Total cost* column is compared with each item in the *Total NRV* (net realisable value) column to obtain the lower cost. Whichever is lower in value becomes the reporting value for inventories. The total inventory value has changed from \$3 820 (current recorded historical cost) to \$3 592 (the lower cost and NRV). If the firm wishes to have the NRV reflected in the accounts, an adjustment to the inventory control account is required to reflect these new valuations. This decrease in inventory value is reported as a loss, and the book value of inventory is decreased.

The firm may still have the historical cost recorded in the book of accounts and only change the value for reporting purposes.

This is an application of the qualitative characteristic of reliability.

General journal (extract)

Inventory adjustment	Dr	228.00	← Profit and loss summary
Inventory control (Balance-day adjustment cost, \$3 820 – NRV \$3 592)	Cr	228.00	← Balance sheet

The application of this rule is usually listed in the notes to the financial reports. Any change to the method of valuation of inventory is also listed in these notes.

If you wish to complete [5.9] on a spreadsheet, then [5.10] indicates the formulas used for the automatic calculation of the reporting value.

[5.10]

	A	B	C	D	E	F	G
1	Calculating reporting value of lower of cost and net realisable value						
2	Reporting value						
			Unit	Total	NRV cost	Total	Lower of
4	Inventory Item	Qty	cost	cost	per unit	NRV	cost or NRV
5	Model 3450	10	120	=B5*C5	125	=E5*B5	=MIN(D5,F5)
6	Model 3465	6	150	=B6*C6	120	=E6*B6	=MIN(D6,F6)
7	Model 3499	8	95	=B7*C7	100	=E7*B7	=MIN(D7,F7)
8	Model 3467	12	80	=B8*C8	76	=E8*B8	=MIN(D8,F8)
9	Inventory value			=SUM(D5:D8)		=SUM(F5:F8)	=SUM(G5:G8)

The standard multiplication process is used in columns D and F. Column G estimates the lower (minimum) value of D and F. This is useful when a firm has a large number of inventory items to assess and needs the total of this reporting value.

Review & practice 5

- Use a spreadsheet to calculate the figure that will be reported for inventories in the financial reports at the end of the accounting period. All values are net of GST.
- Prepare the general journal entry to record the anticipated loss on sale of inventories.

Item of inventory	Qty	Cost/unit	NRV/unit
		\$	\$
A1	1 000	8.00	9.25
B2	600	8.60	8.00
C3	525	5.00	4.89
D4	862	10.00	8.00
E5	1 500	13.25	16.00

- Use a worksheet or spreadsheet to calculate the figure that will be reported for inventories in the financial reports at the end of this accounting period from the figures that follow. All figures are net of GST.

Inventories	G10	G11	G12	G13
Quantity	10	100	20	62
Cost per unit	\$3.60	\$22.65	\$19.25	\$45.95
NRV per unit	\$3.75	\$25.55	\$18.90	\$47.95

Understandings

- A business has a choice of two inventory systems – periodic or perpetual.
- The perpetual inventory system keeps a continuous record of the cost price of goods sold. This information is recorded on a stock card.
- The perpetual inventory system enables stock discrepancies to be revealed. This is because the system keeps track of how much inventory should be on hand, and this quantity can be compared with how much is actually on hand.
- Computer technology has allowed even small businesses to enjoy the benefits of the perpetual inventory system.
- When valuing inventories, the 'lower of cost and net realisable value' rule is applied.
- Cost in relation to inventories is the total of purchase price, transportation to location of sale, customs duties and taxes prior to sale, plus any other costs incurred in getting the goods to their present location and condition for sale.
- Net realisable value (NRV) is the amount that the business could sell the product for, less any marketing, distribution or selling expenses

► Exercise 5.19 [decision-making], page 336



Exercises

★ 5.1 Assets versus inventories

List two items that would be assets but not inventories for each of the following types of businesses.

- | | |
|---------------------|--------------------------|
| a plumbing | e service station |
| b hotel | f optometrist |
| c newsagency | g pastoralist. |
| d florist | |

★ 5.2 Identifying inventories

Saintly Shoes manufactures shoes. Which items in the following list would be considered inventory for this firm?

- a** rolls of leather
- b** industrial-strength glue in drums
- c** shoe blocks – used for mounting shoes in the production process
- d** sheets of vinyl from which shoe soles are cut
- e** drying equipment
- f** brooms used by apprentices to clean up the workshop floor.

★★ 5.3 Perpetual and periodic inventory systems



You are employed by Rapid Memory Ltd, which produces thousands of memory chips each day. Advancements in technology have made it essential for your firm to remain competitive in the computer industry. Which inventory system would you recommend for recording the stock of memory chips? Provide a memo, which is to be distributed throughout the firm, that validates your decision.

★★ 5.4 Accounting for inventories – periodic method

Using the periodic method of accounting for inventories, complete the profit and loss summary account as at 30 June 2010:

	\$
Sales	350 000
Sales returns	20 000
Purchases	200 000
Purchases returns	10 000
Freight inwards	4 000
Customs duty	2 000
Inventory (1/7/2009)	215 000
General and administrative expenses	20 000
Finance expenses	15 000
Selling and distribution expenses	39 000
Inventory (30/6/2010)	198 000

★★ 5.5 Inventory as an asset and an expense



One of the two inventory systems discussed in this chapter records the cost of inventory purchased as an asset and the cost of inventory sold as an expense. The other system records the cost of inventory purchased as an expense and the cost of inventory on hand at the end of the period as an asset. Identify which system applies to each of these situations. Provide a short explanation of how you arrived at your answer.

★ 5.6 Stock card – weighted average (no returns)

From the following data, prepare a stock card using weighted average as the costing method. (All figures provided are net of GST.)

2010

Jan 1 Balance 10 units at \$1 each

Purchases

Jan 9 20 units @ \$2 each
 21 10 units @ \$1 each
 23 12 units @ \$3 each

Sales

Jan 6 5 units
 16 15 units
 29 10 units

- A stocktake on 31 January revealed 23 units in stock.

Show a general journal entry for any discrepancy.

★ 5.7 Stock card – weighted average (no returns)

From the following data, prepare a stock card using weighted average as the costing method. (All figures provided are net of GST.)

2010

Aug 1 Balance – 425 units @ \$7.00 each

Purchases

Aug 3 541 units @ \$6.00 each
 10 624 units @ \$5.00 each
 25 750 units @ \$7.00 each

Sales

Aug 7 500 units
 14 650 units
 29 500 units

The stocktake on 31 August revealed 650 units in stock.

Show the general journal entry necessary to record any discrepancy.

★★ 5.8 Stock card – weighted average (returns)

From the following data, prepare a stock card using weighted average as the costing method. Prepare a general journal entry to show any discrepancy found. (All figures provided are net of GST.)

2010

Balance

Sep 1 Balance of 65 units @ \$3.00 each

Purchases

Sep 4 50 units @ \$4.00 each
 9 72 units @ \$5.00 each
 14 90 units @ \$3.00 each

Sales

Sep 2 30 units
 11 56 units
 16 40 units
 26 60 units

Purchases returns

Sep 8 10 units @ \$4.00 each

Sales returns

Sep 20 9 units sold on 16 Sep

Stocktake

Sep 30 Stocktake revealed 85 units in stock.

★★ 5.9 Stock card – weighted average (returns)

From the following data, prepare a stock card using the weighted average method of costing inventories. Prepare a general journal entry to show any discrepancy found. (All figures provided are net of GST.)

2010

Oct 1 850 goods on hand at a value of \$6.50 each
 7 Sold 200 goods
 9 Purchased 400 goods @ \$6.00 each
 11 Returned 50 goods bought on 9 October to supplier
 15 Sold 500 goods
 18 Sold 450 goods
 20 70 goods sold on October 18 were returned
 25 Purchased 600 goods @ \$7.00 each
 28 Purchased 500 goods @ \$8.00 each
 30 Sold 1 000 goods
 31 Physical stocktake revealed 225 units on hand

★★ 5.10 Physical stocktake and its role



Both systems of accounting for inventory rely on a physical stocktake. Describe to the new finance personnel the role of the stocktake in both systems.

★★ 5.11 Stock card – FIFO (returns)

From the following data, prepare a stock card using the FIFO method of costing inventories. Prepare a general journal entry to show any discrepancy found. (All values are net of GST.)

Oct 1 850 goods on hand at a value of \$6.00 each
 7 Sold 200 goods
 9 Purchased 400 goods @ \$6.00 each
 11 Returned 50 goods bought on 9 October to supplier
 15 Sold 500 goods
 18 Sold 450 goods
 20 70 goods sold on 18 October were returned
 25 Purchased 600 goods @ \$7.00 each
 28 Purchased 500 goods @ \$8.00 each
 30 Sold 1 000 goods
 31 Physical stocktake revealed a surplus of five units

★★ 5.12 Stock card – FIFO (returns)

From the following data, prepare a stock card using the FIFO method of costing inventories. Prepare a general journal entry to show any discrepancy found. (All values are net of GST.)

2010

- Oct 1 100 units on hand valued at \$4.60 each
- 6 200 units were purchased at a cost of \$5.00 each
- 9 400 units were purchased at a cost of \$5.10 each
- 11 10 of the units purchased on 6 October were returned to the supplier
- 13 70 units sold for \$15.00 each
- 16 350 units sold for \$15.00 each
- 18 15 units sold on 13 October were returned in good order and were put back into stock
- 20 Purchased 500 units at \$6.00 each
- 24 Purchased 400 units at \$6.05 each
- 26 Sold 1 000 units at a special price of \$12 each
- 28 Sold 100 units for \$15.00 each
- 29 Purchased 300 units at \$6.05 each
- 31 A physical stocktake revealed that there were 380 units on hand

★★ 5.13 Stock card – FIFO (returns)

From the following data, prepare a stock card using the FIFO method of costing inventories. Prepare a general journal entry to show any discrepancy found. (All values are net of GST.)

2010

- Nov 1 On hand are 300 toy trucks valued at \$2.20 each
- 2 Sold 40 toy trucks for \$4.80 each
- 6 Sold 100 toy trucks for \$5.00 each
- 11 Purchased 150 toy trucks at \$2.60 each
- 14 10 toy trucks sold on 6 November were returned in good order
- 18 Sold 190 trucks at \$5.00 each
- 20 Purchased 100 trucks at \$2.80 each
- 22 Sold 140 trucks for \$5.20 each
- 26 Returned 30 trucks purchased on 20 November
- 28 Purchased 100 trucks at \$3.00 each
- 30 A physical stocktake revealed a shortage of 3 trucks

★★ 5.14 Stock card – FIFO (returns)

From the following data, prepare a stock card using the FIFO method of costing inventories. Prepare a general journal entry to show any discrepancy found. (All values are net of GST.)

Stock item:	Clocks
Stock no.:	544 433
Date of last stocktake:	30 November
Quantity on hand:	400 items
Value per item	\$11.00 each

2010

- Dec 3 Purchased 200 clocks for \$12 each
- 7 Sold 450 clocks at \$32 each
- 12 Purchased 500 clocks at a special purchase price of \$8 each
- 13 Returned 50 clocks purchased on 12 December to their supplier as they were faulty
- 17 Purchased 300 clocks at \$9 each
- 18 Sold 180 clocks for \$32 each
- 19 Sold 100 clocks for \$32 each
- 23 Purchased 400 clocks for \$11.00 each
- 26 5 clocks sold on 19 December were returned
- 31 A physical stocktake revealed 3 clocks missing

★★ 5.15 Stock card – FIFO and weighted average (returns)

From the following data, prepare stock cards using the FIFO method for the xylophones and the weighted average method of costing inventories for the toy trumpets. Prepare one general journal entry to show any discrepancies found for these inventories. (All values are net of GST.)

2010

- | | | |
|-----|----|---|
| Oct | 1 | 10 xylophones on hand valued at \$14.60 each and 300 toy trumpets valued at \$2.20 each |
| | 2 | Sold 40 toy trumpets for \$3.80 each |
| | 6 | 20 xylophones were purchased at a cost of \$5.00 each
Sold 100 toy trumpets for \$4.00 each |
| | 9 | 3 of the xylophones purchased on 6 October were returned to the supplier |
| | 11 | 100 xylophones were purchased at a cost of \$5.10 each
Purchased 150 toy trumpets at \$3.60 each |
| | 13 | 7 xylophones sold for \$25.00 each |
| | 14 | 10 toy trumpets sold on 2 October were returned in good order |
| | 16 | 35 xylophones sold for \$25.00 each |
| | 18 | 2 xylophones sold on 13 October were returned in good order and were put back into stock
Sold 190 toy trumpets at \$5.00 each |
| | 20 | Purchased 50 xylophones at \$6.00 each
Purchased 100 toy trumpets at \$3.80 each |
| | 22 | Sold 140 toy trumpets for \$6.20 each |
| | 24 | Purchased 40 xylophones at \$6.05 each |
| | 26 | Sold 100 xylophones at a special price of \$22 each to the local creche
Returned 30 toy trumpets purchased on 20 October |
| | 28 | Sold 10 xylophones for \$25.00 each
Purchased 100 toy trumpets at \$3.90 each |
| | 29 | Purchased 30 xylophones at \$6.55 each |
| | 31 | A physical stocktake revealed that there was a xylophone broken that had to be removed from stock and that five toy trumpets were not found. Two toy trumpets were found to have been removed from stock by the owner who had taken them as drawings, while the other three toy trumpets are missing – presumed stolen. |

★★★ 5.16 Stock card – locate errors (FIFO)

The following stock card is in error. Locate the errors and adjust the stock card accordingly. (All *In* and *Out* quantities are correct, and all values are net of GST.)

Date	Particulars	In			Out			Balance		
		Qty	Unit cost \$	Total cost \$	Qty	Unit cost \$	Total cost \$	Qty	Unit cost \$	Total cost \$
Aug 1	Balance							500	5.00	2 500.00
2	Purchase	700	4.00	2800.00				500	5.00	2 500.00
								700	4.00	2 800.00
6	Sales at cost price				500	5.00	2500.00			
					50	4.00	200.00	650	4.00	2 600.00
8	Purchase	600	2.00	1200.00				650	4.00	2 600.00
								600	2.00	1 200.00
14	Sales at cost price				650	4.00	2600.00			
					100	2.00	200.00	500	2.00	1 000.00
21	Purchase returns				50	4.00	200.00	50	4.00	200.00
								500	2.00	1 000.00
23	Purchase	150	3.00	450.00				50	4.00	200.00
								500	2.00	1 000.00
								150	3.00	450.00
28	Sales returns at cost price	40	4.00	160.00				90	4.00	360.00
								500	2.00	1 000.00
								150	3.00	450.00
29	Sales at cost price				60	4.00	240.00	30	4.00	120.00
								500	2.00	1 000.00
								150	3.00	450.00
31	Inventory adjustment (shortage)				30	4.00	120.00	500	2.00	1 000.00
								150	3.00	450.00

★★ 5.17 Valuing inventories – worksheet/spreadsheet application

Use a worksheet or spreadsheet to calculate the figure that will be reported for inventories in the balance sheet at the end of the accounting period. Prepare the journal entry to record any anticipated loss on inventories. (All figures are net of GST.)

Inventory item	Qty on hand	Cost per unit net of GST	NRV per unit net of GST
		\$	\$
Batteries	25	99	105
Radiators	37	250	210
Airbags	15	1 500	1 200
Car-door handles	160	23	25
Car seats	10	590	585

★★ 5.18 Valuing inventories – worksheet/spreadsheet application

Use a worksheet or spreadsheet to calculate the figure that will be reported for inventories in the balance sheet at the end of the accounting period. Prepare the journal entry to record any anticipated loss or gain on inventories. All figures are net of GST.

Inventory item	Qty on hand	Cost per unit net of GST	NRV per unit net of GST
		\$	\$
Rustproof paint	150	25.00	25.00
Sledgehammer	10	50.00	32.00
Pack of tacks	100	6.00	6.10
Wheelie bins	50	67.00	77.00
Steel-lined rubbish bins	250	49.00	15.00

★★★ 5.19 Decision-making – inventories

You are required to consider the following case study and write a short report on the issues highlighted in the study. Give your opinion and then justify the stance you have taken.

Kellow's Supplies has a complete range of handbags and leather goods. At the end of each period, a physical stocktake is completed and checked against the inventory records in the computerised accounting package. Any discrepancy between these two independent records is registered and steps are taken to investigate why this has occurred. Kellow's general manager was concerned about this system of inventory valuation because the inventory physical tally count seldom agrees with the perpetual tally of the number of inventories.

It is proposed that Kellow's Supplies should go back to the physical inventory method of accounting for inventory because there were never discrepancies when this method was used. Kellow's is also asking why it cannot value inventory using the weighted average method, which would please the shareholders, because it would report the highest profit for the company.

RC4

Non-current assets

Cost of a non-current asset

- Current and non-current assets
- Measuring the cost of a non-current asset
- Accounting for capital and revenue expenditure

Depreciation and amortisation

- Appreciating and depreciating non-current assets
- Accounting for depreciation and amortisation
- Calculating depreciation and amortisation
- Straight line (prime cost) method of depreciation
- Reducing (diminishing) balance method of depreciation
- Comparing the two depreciation methods

The disposal of property, plant and equipment

- Property, plant and equipment register
- Accounting for disposal of property, plant and equipment

6

Chapter

Part 1 – Cost of a non-current asset

Already know	<ul style="list-style-type: none"> How to account for movements in assets
Need to know	<ul style="list-style-type: none"> Non-current assets: <ul style="list-style-type: none"> distinction between capital and revenue expenditure
Using this knowledge	<ul style="list-style-type: none"> <i>Provides information for decision-making</i> on the historical cost of a non-current asset <i>Assists in discharging accountability</i> by ensuring non-current assets are recorded in the financial reports at the correct value

ACCOUNTING VOCABULARY

Capital expenditure
Current asset

Non-current asset
Revenue expenditure

Learning objectives

After completing this section, you should be able to:

- 1 distinguish between current and non-current assets
- 2 measure the cost of a non-current asset
- 3 distinguish between capital and revenue expenditure
- 4 account for capital and revenue expenditures.

Current and non-current assets

Learning objective 1 Assets can be categorised as **current** and **non-current**.



Current assets are economic resources that will be used up or converted into cash within the normal operating cycle of the business.



Non-current assets are economic resources that will not be used up or converted into cash within the normal yearly operating cycle of the business.

Some assets can be both current and non-current. This occurs because assets are categorised by the concept of time and not by the nature of the asset. For an item to be current, it must be consumed or converted into cash in the next accounting period. Therefore, some items over a period of time may fall into both categories. An example would be investments, which can be made up of bonds maturing within the next accounting period or in future accounting periods.

The type of non-current assets held will vary with different forms of business enterprises. These non-current assets can be further divided into tangible and intangible assets. *Tangible* assets have physical form, while *intangible* assets do not have any physical form. Examples of non-current assets considered in this text are listed in [6.1].

Bonds are investments in corporations or governments that can be traded.

[6.1] Non-current assets

Property, plant and equipment	Intangibles
Furniture	Goodwill
Motor vehicle	Copyrights
Telescope	Patents
Computer equipment	Franchises
Machinery	Trademarks
Buildings	Licences
Factory plant	Leaseholds
Aircraft	Brand names
Land	
Pipelines	
Fencing	

See page 344 for more on appreciating and depreciating non-current assets.

Over time, some non-current assets appreciate in value while others depreciate in value. Assets that *appreciate* in value are generally scarce and still in demand; assets that *depreciate* in value do so because they have a limited life.

There are three factors that limit the life of non-current assets:

- 1 wear and tear, through physical use (motor vehicle)
- 2 technical obsolescence – that is, the process of becoming increasingly out-of-date and inefficient as a result of technological advances and improvements (for example, computer equipment)
- 3 commercial obsolescence – that is, the asset becomes commercially obsolete because of a reduction in market demand for the goods it produces or the services it provides (for example, equipment used to manufacture slide projectors).

Measuring the cost of a non-current asset

Learning objective 2

AASB 1015, Accounting for the Acquisition of Assets states that assets must be recorded at their cost of acquisition. This is the purchase price plus any other costs incidental to the acquisition of the asset. Therefore, the cost of any asset is the *sum of all the costs* incurred to bring the asset to the location and condition necessary for its intended use. When this occurs, the total cost of the non-current asset is said to be *capitalised*. This means that all the costs (excluding GST) are recorded as part of the asset price.

EXAMPLE 1

Newell's Property purchased land for \$350 000 plus agent's fees of \$20 000, legal expenses of \$10 000, inspection fees (soil) of \$2 000 and public liability insurance of \$5 000.

The *land cost* to be recorded in the financial records is:

Purchase price of the land	\$350 000
Agent's fees	20 000
Legal expenses	10 000
Inspection fees (soil)	2 000
Total cost of land	\$382 000

The purchase price, agent's fees, legal expenses and inspection fees are said to be *capitalised*, and the land account (asset) would be debited for \$382 000.

The insurance is not included because it is recurrent expenditure (that is, it occurs year after year). The \$5 000 would be expensed into an account labelled 'insurance expense'. It is not capitalised but closed off to the profit and loss summary account.

All these values are net of GST. GST does not influence the recorded value of any assets or expenses.

When determining the cost of a non-current asset, expenditure relating to the asset needs to be categorised into either capital expenditure or revenue expenditure. Table [6.2] contains some examples of this division.

[6.2]

Capital expenditure	Revenue expenditure
<ul style="list-style-type: none"> • Purchase price of the asset • Cost of preparing the asset ready for use • Any significant additions to the asset • Any significant improvements to the asset 	<ul style="list-style-type: none"> • Ordinary repairs and maintenance • Low-cost items of benefit for several periods • Unnecessary or unreasonable costs

Both these categories of expenditure are treated differently in the accounting process, and the procedures are shown on pages 342–3. It is essential to be able to distinguish between the two different types of expenditure.



Learning objective 3

Capital expenditure is any significant cost that increases the value of a non-current asset.

Capital expenditure adds to the useful life, or extends the service potential of, a non-current asset for more than one accounting period and is reflected in the balance sheet. Examples of capital expenditure include:

- **purchase price of the asset** – for example, the cash price paid for the acquisition of the new or replacement asset and transit costs
- **cost of preparing the asset for use** – for example, installation costs, freight charges and testing once installation has occurred
- **any significant additions to the asset** – for example, an extension to an existing building
- **significant improvements to the asset** – for example, extraordinary repairs that may improve the quality of service rendered by that asset, such as the replacement of a motor that extends the life of the machine, an air-conditioning unit, or installation of escalators to replace stairwells.



Revenue expenditure is any cost relating to non-current assets that is incurred to maintain, but not to extend, the useful life of the asset.

Revenue expenditures are usually ordinary, small, recurring outlays that are incurred to maintain the working condition of the asset and are reflected in the income statement. Examples of additional items of revenue expenditure include:

- **ordinary repairs and maintenance** – to existing property, plant and equipment that are of a general upkeeping nature; for example, lubricant, vehicle tune-ups, and replacements of broken parts
- **low-cost items of benefit for several periods** – wall brackets, in-out trays and paperweights
- **unnecessary or unreasonable costs** – costs of waste or inefficiency when purchasing the asset. For example, if an overtime surcharge is paid to a firm to install a machine and have it ready for use by the next working day and the item then lays idle for two weeks, the surcharge was an unnecessary cost.

The purchase and maintenance of assets can be a significant cost for a business and it is important that the costs associated with non-current assets are recorded correctly.

This procedure is an example of the application of materiality.

Review & practice

1

How would you categorise the following expenditure? Is it capital expenditure or revenue expenditure?

- a** A tennis-coaching company purchases a new motor vehicle.
- b** The life-saving club purchases a second-hand motor vehicle.
- c** A manufacturing company buys grease for plant and machinery.
- d** A plumbing company purchases a back-end on a utility for tools of trade.
- e** Shelving that was water damaged in the research and development wing of CSIRO is replaced.

► Exercises 6.1 to 6.4, pages 368–9

Accounting for capital and revenue expenditure

Learning objective 4 The recording of capital and revenue expenditures differs in the accounting process. **Capital expenditure** is capitalised, which means it is recorded as an asset. The final value of the asset is recorded in the balance sheet, and the value is retained for the next accounting period.

Revenue expenditure is expensed in the current accounting period. This means it is treated as an expense and will appear in the income statement. The expense account is closed off to the profit and loss summary account and is not carried forward to the next accounting period.

Recall that expenditure can be paid for by both cash and credit. Cash transactions are entered in the specialised journals, while credit transactions that involve non-current assets are entered in the general journal. The accounting process for expenditure (both capital and revenue) made for cash and on credit is shown in example 2.

EXAMPLE 2

Machinery is purchased for \$440 000. Installation costs are \$2 200 and insurance is \$1 540 per year. An additional safety shield is purchased for \$2 530 and oil costs are \$55. All values include GST.

Capital expenditure (including GST)

Purchase price of machinery	440 000
Installation costs	2 200
Safety shield	2 530

Revenue expenditure (including GST)

Insurance	1 540
Oil	55

Two options are illustrated on pages 342–3 for this expenditure: cash purchases and credit purchases. For the credit purchases only, the following assumptions are made.

- The machinery is purchased from Trans Pty Ltd on credit.
- Morcom Ltd carries out the installation on credit.
- The safety shield was purchased from Safety Supplies Ltd on credit.
- The insurance is paid to VACC Insurance by cheque.
- The oil is purchased from Mobil Stafford Pty Ltd on credit.



Cash Purchases

Cash payments journal (extract)

	Particulars	Other \$	GST clearing \$	Bank \$
Capitalised expenditure Revenue expenditure	Machinery	400 000	40 000	440 000
	Machinery (installation)	2 000	200	2 200
	Machinery (safety shield)	2 300	230	2 530
	Insurance	1 400	140	1 540
	Maintenance – machinery	50	5	55

General ledger (extract) – T-format

Dr	Particulars	Amount \$	Particulars	Amount \$	Cr
	Insurance expense a/c				
	Bank	1 400			
	Maintenance – machinery expense a/c				
	Bank	50			
	Bank a/c (extract)				
			Payments	446 325	
	Machinery a/c				
	Bank	400 000			
	Bank	2 000			
	Bank	2 300			
	GST clearing a/c				
	Bank	40 575			

General ledger (extract) – columnar format

Particulars	Debit \$	Credit \$	Balance \$
Insurance expense a/c			
Bank	1 400		1 400 Dr
Maintenance – machinery expense a/c			
Bank	50		50 Dr
Bank a/c (extract)			
Payments		446 325	446 325 Cr
Machinery a/c			
Bank	400 000		400 000 Dr
Bank	2 000		402 000 Dr
Bank	2 300		404 300 Dr
GST clearing a/c			
Bank	40 575		40 575 Dr

Credit Purchases

General journal (extract)

Particulars		Debit	Credit
Machinery a/c	Dr	400 000	
GST clearing a/c	Dr	40 000	
Trans Pty Ltd	Cr		440 000
(Purchase of machinery on credit)			
Machinery a/c	Dr	2 000	
GST clearing a/c	Dr	200	
Morcom Ltd	Cr		2 200
(Installation costs associated with machinery)			
Machinery a/c	Dr	2 300	
GST clearing a/c	Dr	230	
Safety Supplies Ltd	Cr		2 530
(Purchase of safety shield for machinery)			
Maintenance – machinery	Dr	50	
GST clearing a/c	Dr	5	
Mobil Stafford Pty Ltd	Cr		55
(Oil purchased for machinery)			

Cash payments journal (extract)

Particulars	Other \$	GST clearing \$	Bank \$
Insurance expense	1 400	140	1 540

General ledger (extract) – T-format				General ledger (extract) – columnar format			
Dr	Particulars	Amount \$	Cr Particulars Amount \$	Particulars	Debit \$	Credit \$	Balance \$
	Insurance expense a/c			Insurance expense a/c			
	Bank	1 400		Bank	1 400		1 400 Dr
	Maintenance – machinery expense a/c			Maintenance – machinery expense a/c			
	Mobil Stafford	50		Stafford	50		50 Dr
	Machinery a/c			Machinery a/c			
	Trans Pty Ltd	400 000		Trans Pty Ltd	400 000		400 000 Dr
	Morcom Ltd	2 000		Morcom Ltd	2 000		402 000 Dr
	Safety Supplies Ltd	2 300		Safety Supplies Ltd	2 300		404 300 Dr
	Morcom Ltd			Morcom Ltd			
			Machinery & GST	2 200		2 200	2 200 Cr
	Safety Supplies Ltd			Safety Supplies Ltd			
			Machinery & GST	2 530		2 530	2 200 Cr
	Trans Pty Ltd			Trans Pty Ltd			
			Machinery & GST	400 000		400 000	400 000 Cr
	GST clearing a/c			GST clearing a/c			
	Trans Pty Ltd	40 000		Trans Pty Ltd	40 000		40 000 Dr
	Morcom	200		Morcom	200		40 200 Dr
	Safety Supplies	230		Safety Supplies Ltd	230		40 430 Dr
	Mobile Stafford Pty Ltd	5		Mobil Stafford Pty Ltd	5		40 435 Dr
	Insurance expense	140		Insurance expense	140		40 575 Dr

Although the details change depending on whether the items have been purchased for cash or on credit, the overall result is the same. Machinery is recorded at the same value, insurance expense is the same, and the value for maintenance transferred to the income statement is the same.

Review & practice 2

- a G Ramly Pty Ltd bought a computer network system for \$150 000 (plus GST) on 3 August 2010 from Computer Solutions Pty Ltd. A more powerful tower was added to this system as the computer's capacity needed to be extended. This cost \$35 000 (plus GST) and was purchased from Sanco Pty Ltd on 23 September 2010. Individual operators needed some disks to access data when they were operating from their notebook computers. Fifty of these formatted disks were purchased for \$2 each (plus GST) from Data Entry Ltd for cash on 31 October 2010. Record the above information in the journals of G Ramly Pty Ltd.
- b Would the cost of repairing an asset after it is placed in service be recorded as part of the capitalised asset cost? Why?

Part 2 – Depreciation and amortisation

Already know

- How to account for the total purchase price of non-current assets

Need to know

- Non-current assets:
 - accounting for property, plant and equipment, including acquisition, depreciation (straight line and reducing balance methods) and disposal of such assets

Using this knowledge

- *Provides information for decision-making* by recognising the net value of the asset as the useful life of the asset decreases, and records the depreciated or amortised expenses relating to non-current assets
- *Assists in discharging accountability* through the recording of the net value of non-current assets in the reports to ensure interested parties have full disclosure of the financial records

ACCOUNTING VOCABULARY

Accumulated depreciation

Amortisation

Appreciating assets

Balance

Book value

Depreciating assets

Depreciation

Net value

Reducing balance

Residual value

Straight line

Useful life

Written down value

Learning objectives

After completing this section, you should be able to:

- 1 distinguish between appreciating and depreciating assets
- 2 account for the depreciation expense of a non-current asset
- 3 account for depreciation using straight line and reducing balance methods
- 4 compare and contrast the two depreciation methods.

Appreciating and depreciating non-current assets

Learning objective 1

The useful life of the asset is the period of time over which the asset gives economic benefit.

As mentioned earlier, some assets appreciate, while other assets depreciate. **Appreciating assets** are those where the useful life does not decrease over the useful life of the asset. Land, for example, is generally an appreciating asset because its useful life does not decrease over time. This appreciating asset either retains or increases in value. Of course, there are exceptions. Land that is unusable due to contamination, or land that has ‘fallen away’ into the ocean or down a crevice, would not be classified as an appreciating asset.

Depreciating assets are those where the useful life of the asset decreases over time. Buildings are an example of a depreciating asset. Their useful life decreases over time. Many other non-current assets do have a limited economic life, and the concept of accounting for depreciation addresses this issue.

The term 'depreciation' is often used interchangeably with 'amortisation'. The two terms have the same meaning, but depreciation is generally used in relation to tangible non-current assets, while amortisation (sometimes referred to as depletion) is generally used to describe intangible non-current assets and natural resources.

Non-current assets are purchased primarily for use by the business to assist in carrying out the operations of the business and to earn revenue. The benefits gained by the use of a non-current asset usually extend over more than one accounting period. Therefore, the capital expenditure on an asset needs to be matched against the revenue earned each year the asset is held or used. The concept of depreciation helps to bring about this matching process.

The cost of a non-current asset is allocated through **depreciation**, which is recorded periodically throughout the useful life of the asset. Depreciation is an expense charged (matched) against the revenue that the asset earns (generates) for the business. Over a number of years, the service potential or benefit of the asset to the business decreases until the asset no longer serves a useful purpose for the business.



Depreciation (amortisation) is the allocation of the cost of the asset to the accounting periods in which it is expected that the asset will contribute to the production of revenue.

While the expense account records the depreciation, another new account is created to show the impact on the asset as it depreciates.

'Aggregate' means 'sum'.



Accumulated depreciation is the aggregate of the depreciation expenses at a given point in time made in respect to a particular asset.

The **accumulated depreciation** account is a negative asset and is credit in nature. The accumulated depreciation is recorded in the balance sheet where it allows the historical cost of the asset to be shown at its net value.

Accounting for depreciation and amortisation

Learning objective 2 Depreciation requires an entry in the general journal. Note that GST does not apply to depreciation. Example 3 shows the entries required.

EXAMPLE 3

A firm bought a motor vehicle for \$40 000 (plus 10% GST) on 1 July 2009. It is expected that the service potential of this asset will decrease by \$5 000 per year for three years of its useful life. Then it will be sold.

General journal (extract)

Date 2010	Particulars	Post ref	Debit \$	Credit \$
Jun 30	Depreciation expense – motor vehicle	Dr	5 000	
	Accumulated depreciation – motor vehicle	Cr	5 000	
	(Balance-day adjustment)			

On 30 June 2010, a balance-day entry would be made in the general journal and repeated at the end of each financial year to allocate the cost of depreciation. The depreciation on motor vehicle account is an expense. The accumulated depreciation on the motor vehicle account is a negative asset and is credit in nature.

Accounting for depreciation addresses the matching principle dilemma discussed in chapter 2.



In order to reflect the depreciation expense for the accounting period reports, the depreciation account would be closed off to the profit and loss summary.

General journal (extract)

Date 2010	Particulars	Post ref	Debit \$	Credit \$
Jun 30	Profit and loss summary	Dr	5 000	
	Depreciation expense – motor vehicle	Cr		5 000
	(Closing entry)			

The general journal entries would be posted to the ledger and the appropriate balances would be shown in the financial reports as follows:

General ledger (extract) – T-format

Dr				Cr
Date	Particulars	Amount \$	Date	Particulars
				Amount \$
Motor vehicle a/c				
2009				
Jul 1	Bank	40 000		
Depreciation expense – motor vehicle a/c				
2010			2010	
Jun 30	Accumulated depreciation	5 000	Jun 30	Profit & loss summary
2011			2011	
Jun 30	Accumulated depreciation	5 000	Jun 30	Profit & loss summary
2012			2012	
Jun 30	Accumulated depreciation	5 000	Jun 30	Profit & loss summary
Accumulated depreciation – motor vehicle a/c				
2010			2010	
Jun 30	Balance c/d	5 000	Jun 30	Depreciation
		<u>5 000</u>		<u>5 000</u>
2011			Jul 1	Balance b/d
Jun 30	Balance c/d	10 000	2011	
		<u>10 000</u>	Jun 30	Depreciation
2012				<u>5 000</u>
Jun 30	Balance c/d	15 000	Jul 1	Balance b/d
		<u>15 000</u>	2012	
			Jun 30	Depreciation
				<u>5 000</u>
			Jul 1	Balance b/d
				<u>15 000</u>
				15 000

General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
Motor vehicle a/c				
2009				
Jul 1	Bank	40 000		40 000 Dr
Depreciation expense – motor vehicle a/c				
2010				
Jun 30	Accumulated depreciation	5 000		5 000 Dr
	Profit & loss summary		5 000	0 Dr
2011				
Jun 30	Accumulated depreciation	5 000		5 000 Dr
	Profit & loss summary		5 000	0 Dr
2012				
Jun 30	Accumulated depreciation	5 000		5 000 Dr
	Profit & loss summary		5 000	0 Dr
Accumulated depreciation – motor vehicle a/c				
2010				
Jun 30	Depreciation		5 000	5 000 Cr
2011				
Jun 30	Depreciation		5 000	10 000 Cr
2012				
Jun 30	Depreciation		5 000	15 000 Cr

Income statement (extract) as at 30 June

	2010 \$	2011 \$	2012 \$
Expenses			
Depreciation – motor vehicle	5 000	5 000	5 000



Each year the depreciation expense is written off against profit for the enterprise. This is how the depreciation is matched against revenue. It is in the business's interest to depreciate assets because depreciation reduces reported profit and therefore reduces the tax payable by the enterprise.

Balance sheet (extract) as at 30 June

	2010 \$	2011 \$	2012 \$
Non-current assets			
Motor vehicle	40 000	40 000	40 000
Less Accumulated depreciation – motor vehicle	<u>5 000</u> 35 000	<u>10 000</u> 30 000	<u>15 000</u> 25 000

The original cost (historical cost) of the asset (\$40 000) is maintained in the balance sheet over the three years. Each year, during the useful life of the asset, the balance of the accumulated depreciation account is carried down to the balance sheet as shown above. At the same time, the accumulated depreciation account effectively reduces the value of the asset in this financial report, maintaining the original cost (historical cost) in the asset account in the ledger. The written down values of \$35 000, \$30 000 and \$25 000 are the net values of the motor vehicle over this time period.

Amortisation (depletion)

The journal entry for amortising an intangible asset is very similar to that for depreciating a non-current asset, and is shown in example 4.

EXAMPLE 4

A firm has a 10-year leasehold with an original value of \$30 000 (net of GST). This intangible asset would be amortised each year over its useful life. If the yearly value to be amortised is \$3 000, each year the following entry would be made in the general journal and posted to the ledger:

General journal (extract)

Date	Particulars	Post ref	Debit \$	Credit \$
2010				
Jun 30	Amortisation expense – leasehold	Dr	3 000	
	Accumulated amortisation – leasehold	Cr		3 000
	(Balance-day adjustment)			

This process is the same as depreciation except the expense account is labelled 'amortisation' and the negative asset account is 'accumulated amortisation'. The intangible asset section of the balance sheet is similar to the property, plant and equipment section.

**Balance sheet (extract)
as at 30 June**

	2010 \$	2011 \$	2012 \$
Assets			
Leasehold	30 000	30 000	30 000
Less Accumulated amortisation – leasehold	<u>3 000</u> 27 000	<u>6 000</u> 24 000	<u>9 000</u> 21 000

✓ Helpful hints

The entry for depreciation or amortisation is always:

Depreciation (or amortisation) expense	Dr
Accumulated depreciation (or amortisation) of asset a/c	Cr

Review & practice 3

- 'Any GST input tax credits claimed are included in the cost of the asset for depreciation purposes.' Is this statement true or false? Explain.
- G Solomon purchased a building for \$660 000 (including GST) on 1 July 2009. To that building she added an extension worth \$27 500 (including GST). The value of depreciation on the building for the year is \$30 000. Complete all journal entries required to record the above information and show the financial report extracts as at 30 June 2010.
- On 30 June 2009, F Saunders Ltd's depreciation account was \$40 000, while the accumulated depreciation account had a balance of \$130 000. Why does the amount of the depreciation expense differ from the accumulated depreciation as at this date?

► Exercises 6.7 to 6.9, page 369

Calculating depreciation and amortisation

Learning objective 3

In the examples used up to this point, the depreciated or amortised dollar value has been provided. However, it is more usual that this value would need to be calculated. The method used to calculate depreciation depends on three elements:

- 1 the basis chosen for assessing the useful life of the asset – either *time* or *output*, or, in special cases, *revenue*
- 2 the specific method adopted for calculating depreciation expenses
- 3 an estimate of the net *amount recoverable* on the ultimate disposal of the asset.

Table [6.3] provides examples of the elements.

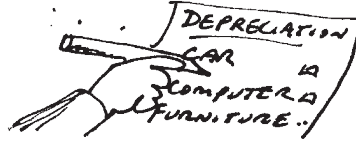
[6.3]

Elements	Some possible examples
1 Useful life based on: <ul style="list-style-type: none"> • Time • Output • Revenue 	<p><i>Technical useful life</i> of computers is three years.</p> <p>Motor vehicles are traded in after four <i>years'</i> service.</p> <p>Machinery is sold after 1 million <i>production units</i> have been manufactured.</p> <p>Machinery is sold after 50 000 hours of use.</p> <p>Motor vehicles are traded in after 70 000 km.</p> <p>Some exploration resources which are finite (such as gold, diamonds)</p>
2 The method chosen	<p>For <i>constant</i> depreciation expense – Straight line</p> <p>For <i>irregular</i> depreciation expense – Units of use</p> <p>– Appraisal</p> <p>For <i>decreasing</i> depreciation expense – Diminishing balance</p> <p>– Sum of the digits</p> <p>For <i>increasing</i> depreciation expense – Appraisal</p>
3 Amount recoverable	The amount that is received when an asset is disposed of through <i>trade-in</i> , <i>sold as a unit</i> or as <i>scrap value</i>

To calculate the annual depreciation expense of an asset, four factors need to be known or estimated:

- original cost of the asset (known with certainty)
 - useful life of the asset
 - residual value (amount recoverable, salvage value)
 - method of depreciation.
- } (must be estimated)

Two depreciation methods will be addressed in this chapter. As each method is often called by an alternative name, both names have been given:



Straight line (prime cost) method of depreciation

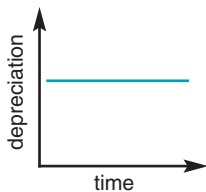
The allocation of the cost of an asset is sometimes judged as being constant (or uniform) over the life of the asset and applies particularly to those assets with a low obsolescence component. Some practical examples of assets with uniform use throughout a period are storage tanks, fencing, surface paving, pipelines, buildings and furniture. In these circumstances, the straight line method is ideal because of its nature and its simplicity.

The following information will be used to illustrate the straight line method of depreciation:

Asset data on the computer furniture

Date of purchase	1/07/2009
Original cost	\$220 000 including GST
Useful life of the asset	5 years
Residual value (amount recoverable, salvage value)	\$50 000

The formula for straight line depreciation is:



$$\text{Annual depreciation} = \frac{\text{Original cost} - \text{Residual value}}{\text{Useful life of asset}}$$

From the information given:

$$\begin{aligned} \text{Annual depreciation} &= \frac{\$200\,000 - \$50\,000}{5 \text{ years}} \\ &= \$30\,000 \text{ per year} \end{aligned}$$

The following entry would be made on 30 June of each year of the useful life of the asset (2010–2014):

General journal (extract)				
Date	Particulars	Post ref	Debit \$	Credit \$
2010				
Jun 30	Depreciation – computer equipment	Dr	30 000	
(each year)	Accumulated depreciation – computer equipment	Cr		30 000
	(Balance-day adjustment)			

Straight line – part year

Pro-rata depreciation

For assets purchased during the financial year, the annual depreciation amount is simply a proportion of the original cost. Using the example given, if the asset was purchased on 1 March 2010, the depreciation value on 30 June 2010 would be a pro-rata calculation of the full year's depreciation cost:

$$4/12 \times \$30\,000 = \$10\,000 \text{ (4/12 represents March, April, May and June)}$$

In this example, the depreciation expense is for the four months from 1 March 2010 to 30 June 2010. In the following year, the depreciation expense would be calculated on a full financial year from 1 July 2010 to 30 June 2011 and a yearly amount of \$30 000 would be recorded.

As the residual value and the useful life of an asset are both estimated, the depreciation value is not an exact, verifiable amount. In the interests of simplicity, when calculating depreciation manually, this text will treat assets acquired or disposed of during the first half of the month as being purchased or sold on the first day of the current month. If a sale or purchase occurs in the second half of the month, it will be treated as occurring on the last day of the month. In addition, the value of depreciation will be rounded to the nearest dollar.

The *Income Tax Assessment Act* requires depreciation to be calculated on a daily basis. For the purposes of this text, we will calculate the pro-rata depreciation using a simplified approach.

EXAMPLE 5

Date of purchase	Assumed date of purchase	Date of sale	Assumed date of sale
3 April	1 April	23 August	31 August
16 March	1 April	15 August	1 August

Note that when using computer applications to calculate depreciation, the appropriate value can be calculated on a daily basis. Figure [6.4] shows how straight line depreciation can be calculated in Microsoft Excel, while [6.5] shows the calculation using the straight line (SLN) method built into the application. The SLN is the built-in function from Excel, which calculates the straight line depreciation for the period. With the straight line method of depreciation, depreciation is the same value every year of the useful life of the asset.

[6.4]

Data

	A	B
1	Asset name	
2	Date of purchase	1/07/10
3	Original cost	200000.00
4	GST	20000.00
5	Useful life (yrs)	5
6	Residual value	50000.00

Entering formula into Excel

Straight line method (showing values)		
	A	B
1	Straight line method	
2	Annual depreciation = (Original cost – Residual value)/Useful life	
3	Annual depreciation	30000.00
4	Daily depreciation	82.19

Straight line method (showing formulas)		
	A	B
1	Straight line method	
2	Annual depreciation = (Original cost – Residual value)/Useful life	
3	Annual depreciation	= (Data!B3-Data!B6)/Data!B5
4	Daily depreciation	= B3/365

[6.5]

Using built-in SLN function in Excel

Straight line method (showing values)		
	A	B
1	Straight line method	
2	Annual depreciation = (Original cost – Residual value)/Useful life	
3	Annual depreciation	30000.00
4	Daily depreciation	82.19

Straight line method (showing formulas)		
	A	B
1	Straight line method	
2	Annual depreciation = (Original cost – Residual value)/Useful life	
3	Annual depreciation	= SLN (Data!B3-Data!B6) /Data!B5
4	Daily depreciation	= B3/365

Review & practice 4

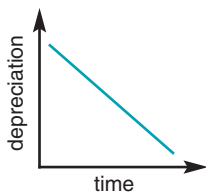
- a** A business installed pipelines worth \$5 million (plus GST) on 1 July 2009. Their residual value is expected to be \$100 000 and their useful life is estimated at 15 years. Calculate the annual depreciation using the straight line method.
- b** A business bought furniture on 1 July 2010 for \$250 000 (plus GST). It is estimated that this furniture will have a useful life of 20 years with a residual value of \$15 000. Calculate the annual depreciation using the straight line method and complete the journal entries required on 30 June 2011.
- c** **Which** of the following is *not* a factor when determining plant and equipment's effective life?
- i** Obsolescence
 - ii** Industry standards
 - iii** Physical life of the asset
 - iv** Scrap price of the asset

► Exercises 6.10 to 6.12, pages 369–70

Reducing (diminishing) balance method of depreciation

The allocation of the cost of an asset using the reducing balance method will result in a decreased depreciation expense over time. Therefore, it is most suitable for assets that give most of their service potential in their early life. Some practical examples are highly technical equipment and highly mechanised machinery. For these assets, the reducing balance method is ideal as it allocates most of the depreciation cost to the early years of the asset's life.

The following information will be used to illustrate the reducing balance method of depreciation:

**Asset data on the computer network**

Date of purchase	1/07/2009
Original cost	\$220 000 including GST
Useful life of the asset	5 years
Residual value (amount recoverable, salvage value)	\$50 000
Assumed rate	24%

The formula for the reducing (diminishing) balance method of depreciation is:

$$\text{Annual depreciation} = \text{rate of depreciation} \times \text{diminished value of the asset}$$

Prior to calculating the depreciation value using the reducing balance method, two factors from this equation need to be clarified:

- What is reduced (diminished) value?
- How is the rate of depreciation calculated?

The **reduced (diminished) value** of an asset is the original cost of the asset less the accumulated depreciation:

Asset	Original cost
Less	Accumulated depreciation at the start of the current period
Equals	Reduced value of the asset

An assumed percentage rate of depreciation will be given in all questions in this text. A formula that is applied to arrive at this rate is shown below:

$$\text{Rate} = \left(1 - \sqrt[n]{\frac{s}{c}} \right)$$

where n = number of estimated periods of useful life
 s = salvage, residual or scrap value
 c = cost

The stepped application of this formula is shown below.

$$\begin{aligned} \text{Rate} &= \left(1 - \sqrt[5]{\frac{50\,000}{200\,000}} \right) \\ &\quad \begin{array}{l} \text{Estimate useful life} \\ \text{Residual value} \\ \text{Original cost} \end{array} \\ \text{Rate} &= \left(1 - \sqrt[5]{0.25} \right) \\ \text{Rate} &= \left(1 - 0.7578582 \right) \\ &= 0.2421417 \end{aligned}$$

This formula assumes that the asset has a residual value of at least \$1 (otherwise, the answer to the formula will always be 0).

Depreciation value

To calculate the depreciation for each of the periods in the example, the diminished value of the asset is multiplied by the rate of depreciation. Therefore, calculations will be carried out on an amount that is reduced each year/period. For our purposes, the rate can be rounded to two decimal places (from 0.2421417 to 0.24). Table [6.6] shows the calculation of depreciation using the reducing balance method over several full years.

This formula is commonly used in computerised applications of depreciation.

The residual value refers to the business's estimate of what the asset is worth to the business at the end of its useful life.

[6.6]

Year ended 30 June	Start of period – asset's reduced (diminished) balance 1 July \$	Rate of depreciation expense	Annual depreciation expense \$	Accumulated depreciation \$	Reduced (diminished) balance – end of period \$
2010	200 000	0.24	48 000	48 000	152 000
2011	152 000	0.24	36 480	84 480	115 520
2012	115 520	0.24	27 725	112 205	87 795
2013	87 795	0.24	21 071	113 276	66 724
2014	66 724	0.24	16 014	149 290	50 710

↑
Reduced balance from
end of last period
brought forward

↑
Reduced balance
from start of
period multiplied
by rate of
depreciation

↑
This is the
aggregate of the
depreciation
expense for the
life of the asset
to date

↑
This is the original
cost of the asset
less the accumulated
depreciation to date

The reduced balance as at 1 July is the original cost less the total depreciation to date. As at 1 July 2011, the reduced balance is:

Original cost	\$200 000
Less Accumulated depreciation	
(\$48 000 + \$36 480)	\$84 480
Reduced balance	\$115 520

The annual depreciation amount for each period is the start of the period's reduced balance multiplied by the rate of depreciation. For the period ended 30 June 2012, the annual depreciation is:

Reduced balance as at 1 July 2011	\$115 520
Multiplied by the rate of depreciation	24%
Annual depreciation as at 30 June 2012	\$27 725

The end-of-period reduced balance is the start-of-period reduced balance less the depreciation expense for the period:

Reduced balance as at 1 July 2011	\$115 520
Less Annual depreciation for the period	27 725
Reduced balance as at 30 June 2012	\$87 795

At the end of the estimated useful life of the asset, an adjustment needs to be made to the depreciated value [6.7]. This adjustment results from rounding the rate of depreciation (usually to two decimal places).

[6.7]

Year ended 30 June	Start of period – asset's reduced balance 1 July \$	Rate of depreciation expense	Depreciation expense to 30 June \$	Accumulated depreciation \$	Reduced (diminished) balance end of period \$
2014	66 724	0.24	16 014 710	149 290 150 000	50 710 50 000

The yearly depreciation value will be more precise if rounding is minimised. Try reworking the above table using 0.24214 as the rate of depreciation. Although the formula is utilised in business, particularly in computer applications of depreciation, some businesses use an approximation method. For the purpose of this text, students will have the option of calculating the rate using either the formula or the given rate.

Pro-rata depreciation

Because the residual value and the useful life of an asset are also estimated in this method, the depreciation value is not an exact, verifiable amount. When calculating depreciation manually, this text will once again treat assets acquired or disposed of during the first half of the month as being purchased or sold on the first day of the current month. If a sale or purchase occurs in the second half of the month, they will be treated as occurring on the first day of the following month. The value of depreciation will also be rounded to the nearest dollar.

When an asset is purchased or disposed of during a financial year, calculations are necessary on a pro-rata basis. In the previous example, if the asset was purchased on 1 March 2009, the depreciation value on 30 June 2009 is for four months.

$$4/12 \times \$48\,000 = \$16\,000 \text{ (the first year's annual depreciation value)}$$

No further adjustments are required to the annual depreciation value until the final year. Table [6.8] shows the calculation of depreciation using the reducing balance methods, including pro-rata calculations in the first and last periods.

[6.8]

Year ended 30 June	Start of period – asset's reduced (diminished) balance 1 July \$	Rate of depreciation expense	Annual depreciation expense \$	Accumulated depreciation \$	Reduced (diminished) balance end of period \$
2009	200 000	0.24	16 000	16 000	184 000
2010	184 000	0.24	44 160	60 160	139 840
2011	139 840	0.24	33 562	93 722	106 278
2012	106 278	0.24	25 507	119 229	80 771
2013	80 771	0.24	19 385	138 614	61 386
2014	61 386	0.24	14 733	153 347	46 653
			(3 347)	150 000	50 000
				\$150 000	\$50 000
				Accumulated depreciation + Residual value	

The subtraction of \$3 347 in the depreciation expense in 30 June 2014 is necessary to record a residual value of \$50 000. As \$61 386 less \$14 733 equals \$46 653, and \$50 000 is the residual value, a reduction to the depreciation charge of \$3 347 needs to be included to produce the expected residual value.

Spreadsheet application

There are two options for calculating depreciation using a spreadsheet:

- 1 A formula can be entered to calculate the value of depreciation and return the reduced (diminished) value of the asset [6.9].
- 2 The built-in diminished balance (DB) formula can be applied [6.10]. The DB function is built into the spreadsheet and allows for the reduced (diminished) balance figure to be automatically calculated.

[6.9]

Data

	A	B
1	Computer network	
2	Date of purchase	1/07/09
3	Original cost	220000
4	GST	20000
5	Useful life in years	5
6	Residual value	50000
7	Period for calculation of depreciation in years	1
8	Months in depreciation period	12

Calculation of rate (showing values)

	A	B	C
1	Reducing balance formula for calculation of depreciation		
2	0.242141717		

Calculation of rate (showing formulas)

	A
1	Reducing balance formula for calculation of depreciation
2	=1-EXP(LN(Data!B6/Data!B3-Data!B4)/Data!B5)

[6.10]

Calculation of rate using DB function (showing values)

	A	B	C
1	Reducing balance method of depreciation		
2	Year	Each year	
3	1	48400.00	
4	2	36687.20	
5	3	27808.90	
6	4	21079.14	
7	5	15977.99	

Calculation of rate using DB function (showing formulas)

	A	B
1	Reducing balance method of depreciation	
2	Years	Each year
3	1	= DB(Data!B\$3-Data!B\$4,Data!B\$6,Data!B\$5,A3)
4	2	= DB(Data!B\$3-Data!B\$4,Data!B\$6,Data!B\$5,A4)
5	3	= DB(Data!B\$3-Data!B\$4,Data!B\$6,Data!B\$5,A5)
6	4	= DB(Data!B\$3-Data!B\$4,Data!B\$6,Data!B\$5,A6)
7	5	= DB(Data!B\$3-Data!B\$4,Data!B\$6,Data!B\$5,A7)

Review & practice 5

- When** would the reducing balance method of calculating depreciation be most appropriate to use?
- For which** industries would this method of depreciation be most applicable?
- Jim's Express Bar wishes to depreciate its computer equipment, which was purchased on 1 July 2009 for \$92 800 (plus GST). You have been asked to calculate the depreciation for each year of the life of the asset using the reducing (diminishing) balance method. The estimated life of the computer equipment is four years and the residual is anticipated to be \$6 500. Round the calculated rate to four decimal places. Assume the rate is 0.48 if not using the formula.

Comparing the two depreciation methods

Learning objective 4 One advantage of using spreadsheet applications in accounting is the ability to generate useful reports. One report that is particularly useful is a comparison of depreciation and accumulated depreciation values for a particular asset using two different methods. This is shown in [6.11].

[6.11]

Data

	A	B
1	Computer network	
2	Date of purchase	1/07/09
3	Original cost	220000
4	GST	20000
5	Useful life in years	5
6	Residual value	50000
7	Period for calculation of depreciation in years	1
8	Months in depreciation period	12

Report showing data

	A	B	C	D	E	F
1	Depreciation schedule comparing straight line with reducing balance method of depreciation					
2	Asset	Computer network				
3		Straight line method		Reducing balance method		
4	Years	Depreciation	Accumulated depreciation	Depreciation	Accumulated depreciation	
5						
6	1	30000	30000	48428.34	48428.34	
7	2	30000	60000	36701.82	85130.16	
8	3	30000	90000	27814.78	112944.94	
9	4	30000	120000	21079.66	134024.60	
10	5	30000	150000	15975.40	150000.00	
11	6	0	150000	0.00	150000.00	

Formula for calculating reducing balance depreciation

	A
1	Reducing balance formula for calculation of depreciation
2	=1-EXP(LN(Data!B6/Data!B3-Data!B4)/Data!B5)

Report showing formulas using built-in function

	A	B	C
1	Depr		
2	Ass	= Data!A1	
3		Straight Line Method	
4	Year	Depreciation	Accumulated depreciation
5			
6	1	= IF(A6<=Data!B\$5,(((Data!B\$3-Data!B\$4)-Data!B\$6)/Data!B\$5),0)	= IF(A6<=Data!B\$5,(B6+C5),C5)
7	2	= IF(A7<=Data!B\$5,(((Data!B\$3-Data!B\$4)-Data!B\$6)/Data!B\$5),0)	= IF(A7<=Data!B\$5,(B7+C6),C6)
8	3	= IF(A8<=Data!B\$5,(((Data!B\$3-Data!B\$4)-Data!B\$6)/Data!B\$5),0)	= IF(A8<=Data!B\$5,(B8+C7),C7)
9	4	= IF(A9<=Data!B\$5,(((Data!B\$3-Data!B\$4)-Data!B\$6)/Data!B\$5),0)	= IF(A9<=Data!B\$5,(B9+C8),C8)
10	5	= IF(A10<=Data!B\$5,(((Data!B\$3-Data!B\$4)-Data!B\$6)/Data!B\$5),0)	= IF(A10<=Data!B\$5,(B10+C9),C9)
11	6	= IF(A11<=Data!B\$5,(((Data!B\$3-Data!B\$4)-Data!B\$6)/Data!B\$5),0)	= IF(A11<=Data!B\$5,(B11+C10),C10)

Report showing formulas (continued)

	D	E
1		
2		
3	Reducing balance method	
4	Depreciation	Accumulated depreciation
5		
6	= IF(A6<=Data!B\$5,((Data!B\$3-Data!B\$4-Report!E5)*Calculation of rate!A\$2),0)	= IF(A6<=Data!B\$5,(Report!E5+Report!D6),E5)
7	= IF(A7<=Data!B\$5,((Data!B\$3-Data!B\$4-Report!E6)*Calculation of rate!A\$2),0)	= IF(A7<=Data!B\$5,(Report!E6+Report!D7),E6)
8	= IF(A8<=Data!B\$5,((Data!B\$3-Data!B\$4-Report!E7)*Calculation of rate!A\$2),0)	= IF(A8<=Data!B\$5,(Report!E7+Report!D8),E7)
9	= IF(A9<=Data!B\$5,((Data!B\$3-Data!B\$4-Report!E8)*Calculation of rate!A\$2),0)	= IF(A9<=Data!B\$5,(Report!E8+Report!D9),E8)
10	= IF(A10<=Data!B\$5,((Data!B\$3-Data!B\$4-Report!E9)*Calculation of rate!A\$2),0)	= IF(A10<=Data!B\$5,(Report!E9+Report!D10),E9)
11	= IF(A11<=Data!B\$5,((Data!B\$3-Data!B\$4-Report!E10)*Calculation of rate!A\$2),0)	= IF(A11<=Data!B\$5,(Report!E10+Report!D11),E10)

An analysis of the report in [6.11] shows that the different methods of depreciation affect the financial records of the business through the level of profit. The straight line method, as expected, gives an even allocation of depreciation per year, while the reducing balance method allocates most of the depreciation in the early years of the useful life of the asset.

Some assets are better suited to being depreciated by the straight line method, while others are more suitable for the reducing balance (diminished balance) method. The straight line method is particularly suitable for assets that lose their economic benefit evenly over a period of time, such as oil pipelines. The diminished balance method is particularly suitable for assets that lose their economic benefit more quickly in the early part of their lives, such as motor vehicles.

The method that best reflects the use of the asset is the most appropriate method to choose. The objective of depreciation is to apportion the cost of the asset to the years in which it assists in generating profit. This fulfils the matching principle. Therefore, the method that apportions cost most closely to actual use is the appropriate method to use.

Review & practice 6

Complete the report from [6.11] using the built-in function in the spreadsheet application.

► Exercise 6.26, page 372

Part 3 – The disposal of property, plant and equipment

Already know

- How to account for the total purchase price of property, plant and equipment; and for the depreciation of these non-current assets

Need to know

- Non-current assets:
 - disposal of property, plant and equipment
 - preparation of property, plant and equipment register

Using this knowledge

- *Provides information for decision-making* on the value of any gain or loss made when disposing of property, plant and equipment
- *Assists in discharging accountability* by recognising revenue or expenses that have occurred when property, plant and equipment is disposed of by the business. It also assists with having accurate records of assets in the asset register and in the balance sheet

ACCOUNTING VOCABULARY

Book value

Carry down value

Disposal of property, plant and equipment

Gain on sale

Loss on sale

Property, plant and equipment register

Written down value

Learning objectives

After completing this section, you should be able to:

- 1 prepare a property, plant and equipment register
- 2 account for the disposal of property, plant and equipment
- 3 recognise any gain or loss made when disposing of property, plant and equipment.

Property, plant and equipment register

Learning objective 1

A comprehensive record of all details associated with these assets must be kept by the business for referral throughout the life of the asset and beyond. Ledger accounts and journal entries contain only basic information about assets, so a subsidiary ledger is created to facilitate detailed recording. This subsidiary ledger is called a register and is made up of a separate sheet, card or database form for each individual asset. In addition to maintaining these records, checking for accuracy at appropriate intervals will also occur.

Consider a situation where a firm owns three trucks. An asset register record would exist for each of these trucks, detailing information such as the make of truck, purchase price and supplier, estimated residual value, location of the truck, registration number, engine number, insurance cover, depreciation method, how much has been depreciated to date, and disposal when this occurs. Figure [6.12] contains a sample register form for one of the trucks in this example.

[6.12]

REGISTER FORM 1

Side 1

Property, plant and equipment register form						
Date of purchase:	1/7/07		Asset's identification number:	3212.3		
Classification:	Motor vehicle		Manufacturer's serial number:	325 7690		
Item:	Truck		Registration no.:	907 BXS		
Make:	Ford		Engine no.:	G30-908236454		
Year of manufacture:	2007		Estimated useful life:	5 years		
Supplier:	Ford Truck Sales Ltd		Estimated residual value:	\$5 000		
	Fortitude Valley, Brisbane		Taxable rate of depreciation:	25%		
Original cost:	\$45 000		Location:	Toowoomba Office		
GST:	\$4 500					
Installation or additional cost:	nil					
Method of depreciation:	Reducing balance					
Depreciation rate:	0.355606					
Insurance:	GIO – Replacement value					
Legal documents held:	—					
Additional information:	—					

Date	Total cost	Depreciation	Accumulated depreciation to date	Reduced balance (net value)	Depreciation for taxation purposes	Insurance premium
30/6/08	\$45 000	\$16 002	\$16 002	\$28 998	—	\$1 200
30/6/09	\$45 000	\$10 312	\$26 314	\$18 686	—	\$1 200
30/6/10	\$45 000	\$6 645	\$32 959	\$12 041	—	\$1 200
30/6/11	\$45 000	\$4 282	\$37 241	\$7 759	—	\$1 200

Side 2

Property, plant and equipment register form				
Repairs and maintenance				
Date	Name of repairer	Reason for repairs and/or maintenance	Cost	Remarks
12/10/08	GG Repairs	5 000 km service	—	Under warranty
21/3/09	GG Repairs	30 000 km service	\$259	Parts not under warranty

Disposal:	Date:
Purchaser's name:	
Method of disposal:	Amount received:

Control accounts

The property, plant and equipment register acts as a subsidiary ledger for the relevant control accounts. As with any subsidiary ledger system, a control account appears in the general ledger and reflects the total of the individual assets within that account. Each firm would have its own sub-divisions of assets suitable for its individual needs, but possible options are control accounts for furniture, motor vehicles, equipment, professional library, plant, land, tools and buildings. If an enterprise has three trucks, extracts from the property, plant and equipment register would appear as shown in [6.13].

[6.13]

Register form 1 (extract)

Date	Total cost	Depreciation	Accumulated depreciation to date	Reduced balance	Depreciation for taxation purposes	Insurance premium
2011 June 30	\$45 000	\$4 282	\$37 241	\$7 759	—	\$1 200

Register form 2 (extract)

Date	Total cost	Depreciation	Accumulated depreciation to date	Reduced balance	Depreciation for taxation purposes	Insurance premium
2011 June 30	\$15 000	\$3 000	\$6 000	\$9 000	—	\$600

Register form 3 (extract)

Date	Total cost	Depreciation	Accumulated depreciation to date	Reduced balance	Depreciation for taxation purposes	Insurance premium
2011 June 30	\$98 000	\$8 500	\$50 000	\$48 000	—	\$2 300

Total 1 2 3 4
 \$158 000 \$15 782 \$93 241 \$64 759

Ledger accounts and the balance sheet would reflect the total of the relevant columns as shown.

1 Addition of total cost = \$158 000

(\$45 000 + \$15 000 + \$98 000)

2 Addition of depreciation = \$15 782

(\$4 282 + \$3 000 + \$8 500)

3 Balance equals the addition of accumulated depreciation to date = \$93 241
 (\$37 241 + \$6 000 + \$50 000)

General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2011			2011		
Motor vehicle – control a/c					
Jun 30	Balance b/d	158 000			
Depreciation expense – motor vehicle a/c					
Jun 30	Accumulated depreciation – motor vehicle	15 782			
Accumulated depreciation – motor vehicle a/c					
Jun 30	Balance c/d	93 241			
		<u>\$93 241</u>			<u>\$93 241</u>
			Jul 1	Balance b/d	93 241

General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2011				
	Motor vehicle a/c			
Jun 30	Balance			158 000 Dr
	Depreciation expense a/c			
Jun 30	Acc. dep. motor vehicle	15 782		15 782 Dr
	Accumulated depreciation – motor vehicle a/c			
Jun 30	Depreciation		93 241	93 241 Cr

4 The written down (book) value equals the addition of the unallocated depreciation column = \$64 759
 (\$7 759 + \$9 000 + \$48 000)

Balance sheet (extract) as at 30 June 2011

	\$	\$
Non-current assets		
Motor vehicle	158 000	
Less Accumulated depreciation – motor vehicle	<u>93 241</u>	64 759

In summary, the balance of the control account would equal the addition of the original cost on the sheets, cards or computer data forms in the property, plant and equipment register that refer to the asset category. Therefore, this system provides an independent record to facilitate a valid checking procedure. The maintenance of this subsidiary ledger and the control account in the general ledger should, of course, not be the duties of the same employees. A division of duties between employees should be enforced. Ideally, rotation of duties would also be built into procedures for security purposes.

Review & practice

- a Why** is a property, plant and equipment register required by businesses?
- b When** would a property, plant and equipment register be prepared?
- c Who** would prepare this register?
- d What** details would need to be included in a property, plant and equipment register?
- e How** does the property, plant and equipment register relate to the accounting records of the business?
- f Where** in the accounting program with which you are familiar would the property, plant and equipment register (also called an asset register) be accessed? Try entering into this system the details from sample property, plant and equipment register shown in [\[6.12\]](#).

► Exercises 6.27 and 6.28, page 372

Accounting for disposal of property, plant and equipment

Learning objective 2 Property, plant or equipment may end its useful life to a business when it is:

- sold
- traded-in
- exchanged
- retired and/or obsolete
- stolen
- destroyed by some natural disaster.

The cartoon in [\[6.14\]](#) on page 362 not only communicates a message about the reduction in number of public phones, but also about the way in which some non-current assets are disposed of in Australia. As the useful life of these public phones has been shortened due to technological advancements, in particular mobile phones, these public phones are depicted as 'retired and obsolete'!

When the useful life of the asset has expired, two aspects generally need to be considered:

- 1** All amounts relating to the asset and the accumulated depreciation accounts need to be removed from the accounting records.

[6.14]



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Book value, carrying value and written down value all describe the original cost less the accumulated depreciation of a particular asset

- 2** As assets are more often disposed of for amounts either greater or less than book value, the gain or loss on disposal of the asset must be calculated and brought to account.

If the original cost less accumulated depreciation is greater than the amount received at disposal, a loss has occurred; if the original cost less accumulated depreciation is lower than the amount received, a gain has occurred.

A working account called a **disposal account** is created specifically for the purpose of determining this loss or gain on sale of the asset.



A **disposal account** is a working account that contains all the information regarding the asset to be disposed of and facilitates the calculation of a gain (loss) on disposal.

EXAMPLE 6

Consider the business of A Kennedy, which owns a machine worth \$500 000 that has been depreciated by \$430 000. The machine is to be sold to Traders Ltd. Prior to the sale of the asset, the general ledger would be as follows:

A Kennedy General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
Machinery a/c					
Jul	1 Balance b/d	500 000			
Accumulated depreciation – machinery a/c					
			Jul	1 Balance b/d	430 000

A Kennedy				
General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Machinery a/c			
Jul 1	Balance			500 000 Dr
Accumulated depreciation – machinery a/c				
Jul 1	Balance			430 000 Cr



Step 1



The part year depreciation allocation is $\$10\,000 \times 6/12 = \$5\,000$

The anticipated depreciation for the financial year ending 30 June 2010 was \$10 000 (straight line method) and on 31 December 2009 the machinery was traded-in to Traders Ltd on a new machine worth \$800 000. The trade-in value was \$55 000 (plus GST). The steps to adjust the accounts are:

Adjust depreciation for any part year allocation and post to the ledger to bring depreciation expense up to date at the time of the sale of the asset.

General journal (extract)

Date 2009	Particulars	Post ref	Debit \$	Credit \$
Dec 31	Depreciation expense – machinery	Dr	5 000	
	Accumulated depreciation – machinery	Cr		5 000
	(Depreciation expense for six months)			

General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
	Depreciation expense – machinery a/c				
Dec 31	Accumulated depreciation	5 000			
	Accumulated depreciation – machinery a/c				
			Jul 1	Balance b/d	430 000
			Dec 31	Depreciation	5 000

General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Depreciation expense – machinery a/c			
Dec 31	Accumulated depreciation	5 000		5 000 Dr
	Accumulated depreciation – machinery a/c			
Jul 1	Balance		430 000	430 000 Cr
Dec 31	Depreciation		5 000	435 000 Cr

Step 2



The total of the accumulated depreciation account up to the disposal date is \$435 000.

Transfer the original cost of the asset to the disposal account.

A disposal of machinery account is created as a working account for the purpose of calculating whether a gain (loss) has been made on the disposal of the asset.

General journal (extract)

Date 2009	Particulars	Post ref	Debit \$	Credit \$
Dec 31	Disposal of machinery	Dr	500 000	
	Machinery	Cr		500 000
	(Transfer of asset to disposal a/c)			

General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
	Accumulated depreciation – machinery a/c				
			Jul 1	Balance b/d	430 000
	Machinery a/c				
Jul 1	Balance b/d	500 000	Dec 31	Disposal of machinery	500 000
	Disposal of machinery a/c				
Dec 31	Machinery	500 000			

General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Depreciation expense a/c			
Dec 31	Accumulated depreciation	5 000		5 000 Dr
	Machinery a/c			
Jul 1	Balance	500 000		500 000 Dr
Dec 31	Disposal of machinery		500 000	0
	Disposal of machinery a/c			
Dec 31	Machinery	500 000		500 000 Dr

Step 3



Transfer the accumulated depreciation amount relating to the asset up to the disposal date to the disposal account.

General journal (extract)

Date	Particulars	Post ref	Debit \$	Credit \$
2009				
Dec 31	Accumulated depreciation – machinery	Dr	435 000	
	Disposal of machinery	Cr		435 000
	(Transfer of accumulated depreciation to disposal account)			

General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
	Accumulated depreciation – machinery a/c				
Dec 31	Disposal of machinery	435 000	Jul 1	Balance b/d	430 000
			Dec 31	Depreciation	5 000
	Disposal of machinery a/c				
Dec 31	Machinery	500 000	Dec 31	Accumulated depreciation	435 000

General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Accumulated depreciation – machinery a/c			
Jul 1	Balance			430 000 Cr
Dec 31	Depreciation		5 000	435 000 Cr
	Disposal of machinery	435 000		0
	Disposal of machinery a/c			
Dec 31	Machinery	500 000		500 000 Dr
	Accumulated depreciation		435 000	65 000 Dr

Step 4



Record the asset's trade-in value, including GST.

If the asset is sold for cash rather than traded in, the entry could be recorded in the cash receipts journal.

This entry records the amount received for the machinery being sold less GST. The sale can be for cash, on credit or as a trade-in on a new asset. If the asset is sold on credit or as a trade-in, the entry is as follows:

General journal (extract)

Date 2009	Particulars	Post ref	Debit \$	Credit \$
Dec 31	Accounts receivable – Traders Ltd	Dr	60 000	
	GST clearing	Cr		5 000
	Disposal of machinery (Trade-in of the machine)	Cr		55 000

General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
	Account payable – Traders Ltd				
Dec 31	Disposal of machinery	55 000			
	GST clearing	5 000			
	Disposal of machinery a/c				
Dec 31	Machinery	500 000	Dec 31	Accumulated depreciation	435 000
				Accounts receivable – Traders Ltd	55 000

General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2009				
	Accounts receivable – Traders Ltd			
Dec 31	Disposal of machinery	55 000		55 000 Dr
	GST clearing	5 000		60 000 Dr
	Disposal of machinery a/c			
Dec 31	Machinery	500 000		500 000 Dr
	Accumulated depreciation		435 000	65 000 Dr
	Accounts receivable – Traders Ltd		55 000	10 000 Dr

Step 5



Determine the gain (loss) on the sale of the asset and transfer to a gain (loss) on disposal account.

Learning objective 3

Where an asset is sold for its written down value, there is no gain or loss on sale.

If the disposal account has a debit balance, then a loss has been made. Conversely, if the balance is a credit, then a gain has been made. If the account has a zero balance, then neither a gain nor a loss has occurred and no entry would be made into a loss or gain on disposal account. In the present example, there is a debit balance in the disposal account; therefore, a loss has been made.

General journal (extract)

Date 2009	Particulars	Post ref	Debit \$	Credit \$
Dec 31	Loss on disposal – machinery	Dr	10 000	
	Disposal of machinery (Transfer loss on disposal of machinery)	Cr		10 000

A loss on disposal is classified as an expense and a gain on disposal is a revenue in the income statement.



Step 6

The purchase of the new machine would be recorded in the general journal at its original cost of \$800 000 (plus 10% GST).

General journal (extract)

Date 2009	Particulars	Post ref	Debit \$	Credit \$
Dec 31	Machinery	Dr	800 000	
	GST clearing	Dr	80 000	
	Accounts payable – Traders Ltd	Cr		880 000
	(Purchase of new machine)			

General ledger (extract) – T-format						General ledger (extract) – columnar format				
Dr					Cr	Date	Particulars	Debit	Credit	Balance
	Date	Particulars	Amount	Date	Particulars	Amount		\$	\$	\$
	2009			2009			2009			
		Machinery a/c (extract)					Machinery a/c			
	Dec 31	Accounts payable – Traders Ltd	800 000				Dec 31 Accounts payable – Traders Ltd	800 000		800 000 Dr



Summary of steps in example 6

- 1 Adjust depreciation for any part-year allocation and post to the ledger.
- 2 Transfer the original cost price of the asset to the disposal account.
- 3 Transfer the accumulated depreciation amount relating to the asset to the disposal account.
- 4 Record the asset's trade-in value.
- 5 Assess the gain (loss) on the sale of the asset and transfer to a gain (loss) on disposal account.
- 6 Record the purchase of the new asset (if applicable). Assuming no other transactions occur that affect these accounts at the end of the financial year (30 June 2010), the accounts are either closed off or balanced – T-format only. Accounts are only closed off as at 30 June, the end of the financial year.

Review & practice 8

- a Willing Co. purchased a machine for \$60 000 (net of GST) on 1 July 2009. Additional costs of \$4 000 (plus 10% GST) for installation were incurred. Both payments were made by cheque at the time of purchase. It was anticipated that the machine would be kept for 10 years with a residual value of \$10 000 and the straight line depreciation method would be applied. The machine was sold on 30 June 2012 for \$38 000 (plus GST) to Beams Ltd. Record this information in the ledger of Willing Co.
- b Ingles Ltd bought two motor vehicles for cash for \$26 000 (plus 10% GST) each on 31 December 2009 from G-Track Ltd. It was decided to depreciate these assets over four years using the straight line method when each asset would have an expected residual value of \$14 000 at the end of this time. Due to unforeseen circumstances, both these vehicles were sold for cash on 31 January 2012 for \$25 000 plus GST in total. Record these transactions in the ledger of Ingles Ltd up to 30 June 2012.

► Exercises 6.29 to 6.44, pages 372–7

Understandings

- *Capital expenditure* is expenditure on an item whose life will extend over more than one accounting period. The item is therefore considered an asset to the business.
- *Revenue expenditure* is expenditure on an item that will be consumed during the current accounting period. The item is therefore considered an expense of the business.
- *Depreciation* is the allocation of the depreciable amount of an asset over its useful life. Depreciation is generally used in connection with physical assets.

- *Depreciable amount* means the cost of a depreciable asset less the net amount expected to be recovered on disposal of the asset at the end of its useful life.
- *Amortisation* is the allocation of the cost of certain assets over a period of time or depletion. Amortisation is generally used in relation to intangible non-current assets and natural resources.
- The asset's cost price, useful life, residual value and the method of calculating depreciation influence the amount of depreciation that will be charged to any one accounting period.
- When disposing of an asset, the original cost must be compared with the amount of depreciation charged over its life:
 - If the original cost less accumulated depreciation is greater than the amount received on disposal, a loss on disposal has occurred.
 - If the original cost less accumulated depreciation is lower than the amount received on disposal, a gain on disposal has occurred.
- A property, plant and equipment register is used to record all entries that affect a non-current asset. It acts as a subsidiary ledger.

► Exercise 6.45 [decision-making], page 377

Exercises

★ 6.1 Current to non-current asset



Under what circumstances would it be possible for an asset to change its classification from current to non-current?

★ 6.2 Non-current to current asset



Under what circumstances would it be possible for an asset to change its classification from non-current to current?

★ 6.3 Capital and revenue expenditure



Why is it necessary to distinguish between capital and revenue expenditure?

★★ 6.4 Capital and revenue expenditure

Categorise these items into capital or revenue expenditure:

- a** new tray for a tip truck
- b** adding an extension to an existing office building
- c** purchasing a CD player for a delivery vehicle
- d** oil for vehicle
- e** adding a new and more powerful motherboard to the computer system
- f** purchasing five disks for storage of a spreadsheet depreciation application
- g** registration and insurance of two motor vehicles
- h** an overtime premium paid to complete a project to meet an essential deadline requirement
- i** new motor installed into the printing machine to extend its useful life
- j** delivery expenses associated with the purchase of a computer network
- k** replacement of oil cartridge on machine
- l** purchase of a sun visor for truck
- m** purchase of a new battery for motor vehicle
- n** express delivery premium applicable on Sundays to deliver asset so installation can be started on Thursday of that week. Period required for installation – one day

- o addition of a tower to the computer network system
- p insurance premium for machinery while in transit
- q installing a reconditioned motor to maintain a machine's working condition.

★ 6.5 Purchase of non-current asset – journals

Martin Kingswood Pty Ltd purchased a delivery vehicle on credit for \$20 000 (plus 10% GST) on 5 April 2009 from Daley's Delivery Vehicles. On 5 April, air-conditioning was installed in the vehicle by Air Cool Ltd at a cost of \$1 500 (plus 10% GST). Also on 5 April, vehicle registration of \$620 was paid to the Department of Transport and an insurance premium of \$900 (plus 10% GST) was paid to Update Insurance. On 10 June the vehicle underwent its 3 000 kilometre service at a cost of \$250 (plus 10% GST). Record the above information in the journals of Martin Kingswood Pty Ltd.

★★ 6.6 Purchase of non-current asset – journals

On 1 February 2009, J Thomas commenced business as a taxi owner/driver. He purchased a taxi for \$55 000 (plus 10% GST) from Manly Car Sales and paid \$20 000 cash, with the remainder to be paid in a month's time. Vehicle registration of \$790 and insurance of \$1 200 (plus GST) was paid on 1 February. In addition, before taking delivery of the taxi, a safety shield was installed at a cost of \$3 200 (plus 10% GST) and air-conditioning was installed at a cost of \$1 300 (plus 10% GST). J Thomas also paid the first instalment of \$50 000 for a taxi licence.

You are required to:

- a prepare all journal entries
- b post to the ledger.

★ 6.7 Appreciating and depreciating assets



Write a paragraph that illustrates your understanding of appreciating and depreciating assets.

★ 6.8 Depreciation and amortisation



Explain the difference between depreciation and amortisation.

★★ 6.9 Depreciation

Sam Columbo purchased on 1 July 2010 a new rotary machine on credit from World of Rotary Ltd for his factory for \$550 000 (including GST). To ensure the asset has a long useful life, Sam also purchased a cover for the machine that would stop any dirt getting into the working parts. This cover costs \$10 000 (plus 10% GST). Insurance with VACC Insurance was taken out for cash on this machine at a cost of \$1 000 (plus 10% GST). The machine will be depreciated each year at the rate of \$5 600.

Record the above information in the journals of Sam Columbo and record the relevant information in the extracts of the financial reports as at 30 June 2011.

★★ 6.10 Straight line – journal entries

On 1 August 2009, P Jenkins purchased fencing for cash from The Flexible Fencing Company to the value of \$98 000 (plus 10% GST). It is estimated that the residual value of the fencing is \$500 and the estimated life of the asset is 25 years. Calculate the depreciation using the straight line method and complete all journal entries required to record this financial data up to 30 June 2011.

★★ 6.11 Straight line – journal entries

On 23 February 2009, L Legate purchased a 400-mm reflector telescope for \$15 000 (plus 10% GST) from Micro Traders Pty Ltd. For depreciation purposes, its useful life is expected to be 15 years with \$400 saleable value. Calculate the annual depreciation using the straight line method and complete the journal entries required to record this information up to 30 June 2010.

★★★ 6.12 Depreciation method – decision-making



Blair Maxwell has a computer business. His computer system must be the latest available so that he can maintain his competitive edge. How would this affect the useful life of his non-

current assets, and what elements would be more significant when he is making decisions about whether or not to renew the current computer system that operates within the business?

★ 6.13 Reducing balance – calculations

Sam's Diner purchased automatic grilling machines for \$391 600 (10% GST inclusive) on 30 June 2009 for a take-away restaurant. Calculate the depreciation assuming that the machines will have a serviceable life of eight years and the salvage value will be 10% of the original cost. Round the calculated rate to four places. If not using the formula, assume the rate is 25% using the reducing balance method.

★ 6.14 Reducing balance – journal entries

Julie Kirwin has decided to open a high-tech production enterprise. The enterprise's assets will have a service potential of three years. The original cost of these assets is \$763 800 (plus 10% GST) with a residual value of 25% of the original cost. Assuming she purchased the high-tech production equipment on 26 October 2009, calculate the depreciation for each year using the reducing value method. Complete the journal entry to record the depreciation value for the year 2011. Round the rate to five places, or assume the rate is 37%.

★ 6.15 Reducing balance – journal entries

Lilly Keong wishes to depreciate a boat using the reducing value method over a period of six years. The boat was purchased for \$56 000 (plus 10% GST) on 5 September 2009 from K-Smart Boat Supplies and it is expected to be sold for \$9 000 at the end of its estimated useful life. Calculate the depreciation to June 2012 on this boat and complete all journal entries necessary to record this information for 30 June 2011. Take the rate to three places, or assume a rate of 26%.

★ 6.16 Reason for depreciation



- a Define depreciation.
- b Why is depreciation taken into consideration within the accounting system?

★★ 6.17 Selecting the depreciation method



Your family business has the right to selectively fell a timber forest. It is anticipated that this forest will be workable for 10 years, after which the forest will need time to rejuvenate. For the comfort of your workers, the enterprise has built some quarters on the edge of the forest which will last for approximately 20 years. These quarters will be abandoned when the felling of the timber is completed. Over what time period should the quarters be depreciated, and what method of depreciation would you recommend? Justify your answer.

★★ 6.18 Maintenance and depreciation



A large maintenance bill for an old cutting machine has just been received by your firm. This machine has been depreciated in the company's books using the straight line method. After reviewing the situation, the assistant manager has sent you (the assistant accountant) a note asking you to justify why this machine was depreciated using this method when this is the time that the highest maintenance costs occur. Write a memo dated 4 October 2010, responding to this query.

★★★ 6.19 Basis for depreciation



Sam Waterman and Tim Inglis have approached you, the financial manager, with a concern regarding depreciation. Sam has suggested that the firm should change the allocation of the cost of a thrashing machine used by your business, to the reducing balance method. Tim Inglis objects, saying that the machine will lose its value through obsolescence alone and therefore should be depreciated evenly each year. Write a memo dated 23 September 2010 that would be suitable for circulation to accounting departmental staff explaining the concerns expressed by Sam and Tim. Clarify the issue for future reference and state your recommendation/s.

★★ 6.20 Purchase and depreciation – reducing balance method

On 1 July 2009, Davidson & Co. purchased a motor vehicle for \$20 000 from Clayfield Caryards. It was estimated that the motor vehicle would have a useful life of four years and a residual value of \$10 000. A new stereo system valued at \$500 (plus GST) was installed in

the motor vehicle by Clayfield Caryards. Davidson & Co. paid this amount in cash. In addition, an annual insurance premium of \$1 200 was paid to Car Specialist Insurance Co. on 1 July 2009. Davidson & Co. paid Clayfield Caryards for the motor vehicle on 24 August 2009.

The accountant has decided to depreciate this motor vehicle with the reducing balance method. Either calculate the exact rate or use a rate of 15%.

You are required to complete all necessary journal entries to 30 June 2012.

★★ 6.21 Purchase and depreciation – reducing balance method

A Thomas purchased two motor vehicles for \$15 000 and \$20 000 from Williams and Co. Motor Traders on 8 May 2012. Vehicle registration of \$900 and \$1 200, respectively, was paid on that date. Insurance of \$930 and \$1 400 (plus GST), respectively, was also paid on 8 May. A bumper bar was installed on the more expensive vehicle at a cost of \$200 (plus GST).

The reducing balance method of depreciation is to be used. Either calculate the exact rate or use a rate of 25%. It is anticipated that both vehicles will have a useful life of four years. The vehicle originally purchased for \$15 000 (net of GST) will have a residual value of \$4 000 and the vehicle originally purchased for \$20 000 (net of GST) will have a residual value of \$6 000.

You are required to prepare:

- a** journal entries to 30 June 2013 **b** ledger entries to 30 June 2013.

★★ 6.22 Purchase and depreciation – both methods

S Abraham purchased a hole-digging machine for \$40 000 (plus GST) from Hole Production Ltd on 7 October 2011. She found that, for her own safety, an optional safety shield was required. This was purchased on 9 October 2011 for \$5 000 cash (plus GST), and at this time Abraham paid the insurance premium of \$790 cash (plus GST) to GIO. Abraham thought she would be able to keep the machine working effectively for 10 years and at that time it would have a residual value of \$6 000.

- a** In order to make a comparison, calculate the depreciation expense up to 30 June 2013 using the straight line and reducing balance methods. Either calculate the rate or assume it is 18%.
b Record the transactions and the depreciation values using the straight line method up to 30 June 2013 in the ledger.

★★★ 6.23 Spreadsheet

Complete one comparative depreciation schedule on a spreadsheet using the following information:

- a** Drilling equipment and a bore extractor were purchased from Equipment Co. Ltd for \$25 000 (net of GST) and \$50 000 (net of GST), respectively, on 1 July 2009. The drilling equipment is to be depreciated using the straight line method over a period of 10 years and will have a residual value of \$5 000. The bore extractor will be depreciated by the reducing balance method (use 12% or the spreadsheet's formula) over a period of 15 years and has an anticipated residual value of \$8 000. Include in the depreciation schedule a summation column of the depreciation to date on each item.
b Verify your answer by changing the details to:

	Drilling equipment	Bore extractor
Purchase price	\$20 000	\$60 000
Residual value	\$4 000	\$7 000
Estimated life	12 years	11 years

All these figures are net of GST.

★★ 6.24 Spreadsheet

A firm has two pressing machines that cost \$30 000 and \$42 000 (plus 10% GST on each). The financial adviser asked for a depreciation schedule that showed these machines depreciated over a period of eight years for Machine 1 and 10 years for Machine 2 using the straight line method. Both machines have an estimated residual value of \$3 000. In addition, the financial adviser would like a column next to the stated depreciation for each year indicating the depreciation for that year as a percentage of the cost of the machine. You are to complete this task.

★★ 6.25 Spreadsheet

A Barbaro has asked you to design a depreciation schedule for a furnace that cost \$660 000 (net of GST) with a useful life of seven years. It is anticipated that this machine will be traded in for \$9 000. In the depreciation schedule, A Barbaro wishes to have indicated progressive amounts for each year of the accumulated depreciation figures.

- a Use the reducing balance method either with the formula or use the rate 45.8587388%.
- b Adjust the spreadsheet so that the reducing balance can be calculated for up to and including 12 years.

★★ 6.26 Spreadsheet

Design a versatile depreciation schedule that can be used for six, seven, eight or nine years' depreciation comparing the straight line method of depreciation with the reducing balance method. Verify the correctness of the spreadsheet by entering the following information into the schedule:

- a J Zenner bought a piano for \$16 000 (plus 10% GST). He planned on keeping the piano for seven years. The residual value after seven years is anticipated to be \$9 000. Print out the schedule.
- b Zenner changed his mind and decided to keep the piano for nine years. Use the same spreadsheet in a and make these changes. Print out the changed schedule.

★★ 6.27 Asset register



Redesign the asset register form provided in [6.12] on page 359. Ensure that you include all the information required and that there is an improvement in the layout of the document.

★★ 6.28 Asset register



List any disadvantages that should be considered if a firm decides not to keep an asset register.

★★ 6.29 Disposal – straight line method

Davey's Disco purchased two Rotel sound systems for \$11 200 each (plus 10% GST) on 15 November 2011 from Musicmania Ltd. Insurance in transit of \$200 per system was paid in cash on the same day. It was decided to use the straight line method of depreciation for both systems. It was anticipated that each system would have a useful life of four years and a \$2 400 residual value. On 1 March 2013, one sound system was traded in on a new Rotel system worth \$15 000 (plus 10% GST) from Musicmania. The trade-in value of the original sound system was \$3 500. It was anticipated that the new Rotel system would have a useful life of four years and a residual value of \$4 500. The straight line method of depreciation is to be used on the new system.

Prepare the necessary journal entries and ledger accounts to record this information to 30 June 2013.

★★ 6.30 Disposal – straight line method

Multinett Games Co. bought five new ACR computers on 31 March 2010 for \$9 500 each (plus GST) from Compunet Co. Ltd. It was anticipated that the computers would be kept for three years, by which time they would have a resale value of \$1 400 each. On 1 January 2011, an additional three computers were purchased for \$9 000 each (plus GST). Additional installation costs of \$100 (plus 10% GST) per computer were also paid. The estimated life of the new computers was three years and the residual value \$1 600 per computer. Due to continuous problems, one of the computers originally purchased on 31 March 2010 was traded in on 1 April 2012 to Globalnet Pty Ltd for \$4 800. A new computer was purchased at a cost of \$10 700 (plus GST) from Globalnet. The anticipated life of the new computer is three years and the expected residual value is \$2 000. The straight line method of depreciation is to be used.

Prepare the necessary journal entries and ledger accounts to record this information to 30 June 2012.

★★ 6.31 Disposal – straight line method

Kelly's Manufacturing purchased three computers for \$2 500 each (plus 10% GST) on 13 October 2011 from Corecomp Pty Ltd. Additional memory was added to two of the computers at a cost of \$200 (plus 10% GST) each on 13 October. Cash was paid for the additional memory. It was decided to use the straight line method of depreciation for each computer with an assumed useful life of three years. It is anticipated that the computers with additional memory will have a residual value of \$300 each and the other computer will have a residual value of \$100. On 3 May 2012, the computer without the additional memory was traded in on a Pentium computer worth \$3 500 (plus 10% GST) to Corecomp Pty Ltd. The trade-in value of the original computer was \$1 900 (plus GST). It was anticipated that the Pentium computer would have a useful life of three years and a residual value of \$900. The straight line method of depreciation is to be used. Prepare the ledger accounts to record this information to 30 June 2013.

★★ 6.32 Disposal – straight line method

Simco Traders bought two IBM computers on 31 December 2009 for \$8 500 each (plus GST) from IBM Ltd. The technology administrator estimated that the computers would be kept for four years, by which time they would have a resale value of \$1 000 each. On 31 March 2010, due to business expansion, an additional computer was purchased for \$9 500 cash (plus GST). Installation costs of \$100 (plus GST) were also paid in cash. The computer's estimated useful life was four years with a residual value of \$1 200 and is to be depreciated using the straight line method. Due to persistent breakdowns of one of the computers bought on 31 December 2009, it was traded in on 31 July 2011 to Mac Traders Ltd for \$3 800 (plus GST). As a replacement for the computer traded in, an Apple computer was purchased for cash from Mac Traders Ltd on 31 July 2011 for \$10 800 (plus GST) with an estimated residual value of \$4 200 after three years of service. It was decided to depreciate this computer using the straight line method.

You are to record these transactions in the following ledger accounts up to 1 July 2012:

- a computer hardware a/c
- b accumulated depreciation – computer hardware a/c
- c depreciation – computer hardware a/c
- d disposal of computer hardware a/c.

Note: The accumulated depreciation – computer hardware account, depreciation – computer hardware account, and the disposal of computer hardware account are to be balanced or closed off at the end of each financial year. It is not necessary to balance the computer hardware account for this exercise.

★★ 6.33 Disposal – reducing balance method

Dunn Incorporated purchased three vehicles of equal worth totalling \$87 000 (plus GST) on 1 October 2008 for cash. The reducing balance method is to be used to depreciate these vehicles at a rate of 24.8% per annum. Another vehicle was purchased on 2 June 2009 for \$40 000 cash (plus GST) and this vehicle is expected to have a residual value of \$12 000 and a useful life of three years. Use the reducing balance method to depreciate this vehicle at a rate of 26% per annum. On 31 July 2010, one of the vehicles purchased on 1 October 2008 was sold for \$18 900 cash. A new vehicle was purchased for \$49 000 (plus GST). Cash was paid for this asset. This vehicle is to be depreciated using the reducing balance method at a rate of 32% per annum.

You are required to:

- a record these transactions in the general journal from 1 October 2008 to 30 June 2011
- b prepare the asset, accumulated depreciation and disposal accounts
- c show balance sheet extracts for the asset vehicles and the accumulated depreciation – vehicles account for the period 30 June 2009 – 30 June 2011.

★★ 6.34 Disposal – straight line/reducing balance

Summertime Holiday Resort Pty Ltd purchased four jet skis from Jetson and Co. for \$8 700 each on 1 October 2009. Each ski was to be depreciated using the straight line method and it was estimated that they would have a trade-in value of \$700 each on 1 October 2013 when they would be replaced. On 1 February 2011, two skis needing extensive repairs were sold to Drake Ski and Hire Shop for \$2 800 cash each (plus 10% GST). At the same time,

Summertime Holiday Resort Pty Ltd replaced these two skis with an upgraded model from the same supplier at a cost of \$12 900 each (plus 10% GST) and an estimated residual value of \$1 900 each in five years' time. These new machines are to be depreciated using the reducing balance method. Assume a rate of 30% or calculate the exact rate. Record this information in Summertime Holiday Resort's general ledger to 30 June 2011.

★★★ 6.35 Disposal, both methods of depreciation, capital and revenue expenditure

Thredbo Blue Resort bought two snowmobiles (A and B) on credit on 24 August 2009 for \$28 500 each (plus GST) from SkiSkiSki Pty Ltd. On this date, \$1 000 cash (plus GST) was paid for the installation of special snow rescue features in snowmobile A, and annual insurance of \$500 each (plus GST) was paid for both vehicles.

The resort's accountant estimated that the snowmobiles would be kept for four years and by the end of this time they would have a resale value of \$10 000 each. The reducing balance method of depreciation was to be used for each snowmobile at a rate of 23% for A and 25% for B.

On 14 September 2009, Thredbo Blue Resort paid the outstanding amount to SkiSkiSki Pty Ltd.

On 31 March 2010, due to business expansion, an additional snowmobile was purchased for cash in readiness for the coming winter season. The original cost was \$29 000 (plus GST) and this figure included the cost of installing a long-range cell phone valued at \$430 (plus GST). Modifications were made to the vehicle at a cost of \$2 500 (plus GST) and this additional cost was paid in cash. The snowmobile's estimated useful life was four years, with a residual value of \$11 200, and is to be depreciated using the straight line method.

On 31 July 2010, the snowmobile bought on 24 August 2009, which had the special features installed, was written off in an accident. The insurance company forwarded a cheque for \$25 080 (including GST) to compensate for this write-off.

As a replacement for the snowmobile written off, another vehicle was purchased on credit from Snowy Traders on 31 July 2010 for \$21 800 (plus GST). This vehicle had an estimated residual value of \$10 200 after four years of service. It was decided to depreciate the snowmobile using the straight line method.

- a Rounding figures to the nearest dollar, journalise all transactions for the Thredbo Blue Resort up to and including 30 June 2012.
- b Show the following general ledger accounts:
 - Snowmobiles a/c
 - Accumulated depreciation – Snowmobile a/c
 - Disposal a/c.
- c Prepare balance sheet extracts for the years 30 June 2010 to 30 June 2012, to show how the asset and accumulated depreciation would appear in the financial reports at the end of the period.

★★★ 6.36 Disposal, both methods of depreciation, capital and revenue expenditure

Middlemiss Clothing Company began business on 31 October 2009. Two cutting machines were purchased on this date. Freight of \$2 000 was paid in order to transport the machines to the factory. This cost is to be allocated equally to these assets. Machine 2 required special installation, which cost \$650 (plus 10% GST). General insurance of \$3 500 (plus 10% GST) was paid in total for both machines by cheque. The accountant gave you the following estimates with respect to these two machines:

	Original cost	Estimated residual value	Estimated life
Machine 1	\$19 000 + GST	\$4 500	5 years
Machine 2	\$34 000 + GST	\$10 000	4 years

Depreciation is to be calculated using the reducing balance method at the rate of 26% (or the exact calculated rate) for Machine 1 and 27% for Machine 2.

On 1 August 2012, Machine 2 was sold for \$14 000 (plus GST) cash. On this day, two new machines were purchased on credit from Mack's Machinery Co. One (Machine 3) replaced Machine 2 and the other (Machine 4) was intended for a specific purpose different from that of either of the other machines. Due to the wear and tear on Machine 4 being consistent in

each accounting period, it was decided the straight line method of depreciation would most accurately reflect the use of this machine.

The following information relates to Machines 3 and 4:

	Original cost	Estimated residual value	Estimated life
Machine 3	\$40 000 + GST	\$8 000	4 years
Machine 4	\$10 000 + GST	\$2 000	5 years

Machine 3 is to be depreciated at a rate of 33% (or the exact calculated rate) using the reducing balance method.

You are required to prepare the journal entries to record the transactions for the period from 31 October 2009 to 30 June 2013.

★★★ 6.37 Disposal – reducing balance

T Major Trading Co. operates a retail business. It presently has four company vehicles. The balance in the vehicles account in the general ledger is \$85 000 (debit) and the accumulated depreciation – vehicles account has a credit balance of \$24 200 as at 1 July 2009. The vehicles are depreciated at a rate of 20% using the reducing balance method. Vehicles 1 and 2 were purchased on 1 July 2006, and vehicles 3 and 4 were purchased on 1 July 2007.

On 30 January 2011, it was decided to trade-in vehicles 1 and 2, which had originally cost a total of \$40 000 (net of GST). Estimated total residual value was \$18 000. The trade-in received from Wong Motors on the new vehicle (valued at \$43 000 plus GST) was \$23 000 (plus GST). An amount of \$2 530 (including GST of \$203) was paid for registration and insurance on the new vehicle. The vehicle had signage to the value of \$700 (plus GST) completed before delivery. This was included in the purchase price. The new vehicle was estimated to have a useful life of three years and a residual value of \$27 000. The reducing balance method is to be used to depreciate this vehicle at a rate of 14% or the exact calculated rate.

A vehicle bought on 31 March 2008 for \$20 000 (plus GST) was sold privately on 31 May 2012 for \$6 000 (plus GST) cash.

Record all general journal entries necessary to record depreciation during the period 30 June 2010 to 30 June 2012. Closing entries are not required.

★★★ 6.38 Disposal, both methods of depreciation, capital and revenue expenditure

Coast Air and Sea Rescue Inc. purchased a new boat on credit on 4 March 2009 for \$56 500 (plus GST) from Manly Boats Pty Ltd. On this date, an additional \$4 000 cash (plus GST) was paid for the installation of special rescue features in the boat. Annual insurance of \$1 500 (plus GST) was paid. Coast Air and Sea Rescue's accountant estimated that the boat would be kept for four years, after which it would have a resale value of \$14 000. The reducing balance method of depreciation was to be used at a rate of 29%.

On 17 August 2009, an additional boat was purchased on credit for \$32 500 (plus GST) from Manly Boats Pty Ltd. The reducing balance method was also to apply to this asset, but at a rate of 27%. Insurance costs of \$1 200 for this boat were paid on the same day.

A recent public appeal entitled 'Love Your Air Sea Rescue' was concluded on Valentine's Day in 2010. The funds raised were all put towards the cash purchase of an additional rescue boat at a cost of \$79 000 (plus GST). The new boat was in use within days, given delivery occurred during the summer season. The original cost included the cost of installing a long-range cell phone valued at \$4 530 (plus GST). Additional modifications were made to this boat at a cost of \$12 500 (plus GST) (paid in cash), and it cost \$2 300 to insure it before it was used. The boat's estimated useful life was four years, with a residual value of \$21 200, and it is to be depreciated using the straight line method.

On 31 July 2010, the boat bought on 4 March 2009, which had special features installed, was sold for \$47 080 cash (including GST).

As a replacement for the boat sold on 31 July, another boat was purchased on credit from Boat Traders on 16 August 2010 for \$51 800 (plus GST). This boat had an estimated residual value of \$20 200 after four years of service. It was decided to depreciate this boat using the straight line method.

a Rounding figures to the nearest dollar, journalise all transactions for the Coast Air and Sea Rescue Inc. up to and including 30 June 2012.

- b** Show the following general ledger accounts:
 - Boats (asset) a/c
 - Accumulated depreciation – Boats a/c
 - Disposal a/c.
- c** Prepare balance sheet extracts for the years 30 June 2009 to 30 June 2012, to show how the asset and accumulated depreciation would appear in the end of period reports.

★★★ 6.39 Disposal, both methods of depreciation, capital and revenue expenditure

Farmer Joe bought three tractors (A, B and C) on credit on 12 December 2009 for \$28 500 (plus GST) each from Rocky Tractors Pty Ltd. He paid a deposit of \$70 000. On this date, an additional \$12 000 cash (plus GST) was paid for the installation of special features in tractor A, and annual insurance of \$2 500 (plus GST) was paid for each tractor.

Farmer Joe's accountant made the following estimations:

- The tractors would be kept for five years.
- At the end of this time, they would have a resale value of \$10 000 each.

The straight line method of depreciation was to be used for each tractor at a rate of 20%.

On 1 February 2010, Farmer Joe paid the amount still outstanding on the tractors to Rocky Tractors Pty Ltd.

On 18 May, maintenance on all the tractors was paid at \$400 each (plus GST).

On 3 March 2011, due to an inheritance windfall, an additional tractor (D) was purchased for cash in readiness for the forthcoming harvest. The original cost was \$59 000 (plus GST) and this figure included the cost of installing a long-range cell phone valued at \$7 350 (plus GST). Modifications were made to this tractor at a cost of \$8 500 (plus GST), and this additional cost was paid in cash. This tractor's estimated useful life was four years, with a residual value of \$31 200, and it is to be depreciated using the reducing balance method at a rate of 32%.

On 29 July 2011, tractor A, bought on 12 December 2009, which had the special features installed, was sold for \$25 520 (including GST).

As a replacement for the tractor sold on 29 July, another tractor (E) was purchased on credit from Tractor Traders on 31 July 2011 for \$51 800 (plus GST). This tractor had an estimated residual value of \$23 200 after four years of service. It was decided to depreciate the tractor using the straight line method.

- a** Rounding figures to the nearest dollar, prepare asset registers for each of the tractors owned by Farmer Joe.
- b** Journalise all transactions for Farmer Joe up to and including 30 June 2012.
- c** Show the following general ledger accounts:
 - Tractors control a/c
 - Accumulated depreciation – Tractors control a/c
 - Disposal a/c.
- d** Prepare balance sheet extracts for the years 30 June 2010 to 30 June 2012, to show how the asset and accumulated depreciation would appear each year.

★ 6.40 Reasons for disposal



Why might an asset be sold before the end of its anticipated useful life?

★ 6.41 Disposal – elements involved



When calculating the gain or loss on disposal of an asset, what elements are taken into account?

★ 6.42 Accumulated depreciation account



Justify the use of the accumulated depreciation account in accounting for non-current assets.

★★ 6.43 Determining the cost

Your firm has four computers that it wishes to exchange for one new laser printer. The best option that has been offered is to exchange the four computers plus a \$500 (net of GST) cash payment for the new laser printer. It was decided to take this offer. How would you determine, for accounting purposes, the price paid for the new laser printer?

★★★ 6.44 Purchase and disposal of non-current assets

Record the following transactions for Lisa's Chocolates for the month of February 2009 using a computer accounting package:

- Feb 1 Lisa Dall commenced her business as a specialist confectionery retailer by depositing \$10 000 cash as capital into a bank account in the name of her business, Lisa's Chocolates
- 3 Lisa purchased furniture and fittings for the shop on credit from KJL Ltd for \$4 000 (plus GST)
- 8 Lisa's brother, Brendan, sold her a number of pieces of equipment that she could use in the shop. Lisa paid Brendan \$3 000 cash for this equipment
- 16 Lisa found one piece of equipment (valued at \$1 000) that she had bought from her brother was unsuitable for her business. She was able to sell this piece of equipment for \$800 (plus GST) cash and replaced it with equipment bought on credit from Audio Communications for \$1 500 (plus GST)

You are required to:

- a** print an audit trail for February **b** print a trial balance for February.

★★★ 6.45 Decision-making

From the information and procedures you have covered in this chapter regarding non-current assets, consider the two accounting objectives of:

- 1** providing information for decision-making
- 2** assisting in discharging accountability.

Write a short report on how these objectives have been fulfilled. Give your justified opinion on the statement that 'these measures are only one step towards the final accountability process'.

RC5

Controls

- Internal controls
- Internal control of cash
- Accounts receivable
- Accounts payable
- Inventory
- Non-current assets

Chapter

7

Controls

Already know

- How to account for cash payments

Need to know

- Internal controls must be built into any accounting system
- Internal controls aim to prevent errors from being made, detect errors if they are made, prevent theft and fraud from occurring, and increase efficiency
- Understand the nature and importance of, and specific internal controls over:
 - cash
 - inventories
 - accounts receivable
 - non-current assets
 - accounts payable

Using this knowledge

- *Provides information for decision-making* about issues such as: Is the credit policy adequate? Are inventory levels appropriate? Is sufficient cash held to meet commitments? Should a non-current asset be retained or sold?
- *Assists in discharging accountability* by implementing internal controls over the assets of the business. This has the effect of allocating responsibility for the management and security of assets to specific persons within the business, making it easier to trace errors, loss and theft

ACCOUNTING VOCABULARY

Accounting controls

Administrative controls

Aged analysis of accounts receivable

Bank reconciliation

Cash budget

Credit policy

Creditworthiness

Debt financing

Division of duties

Economic order quantity

Equity financing

Imprest amount

Integrity controls

Internal controls

Just-in-time purchasing

Leasing

Non-cost factors

Petty cash

Physical controls

Property, plant and equipment register

Rotation of duties

Statement of account

Transaction costs

'Whole of life' costs

Learning objectives

After completing this chapter, you should be able to:

- 1 explain how internal controls can be built into an accounting system
- 2 describe how internal controls aim to prevent errors from being made in the first instance, detect errors if they are made, prevent theft and fraud from occurring, and increase efficiency

3 understand the nature and importance of, and specific internal controls over:

- a** cash
- b** accounts receivable
- c** accounts payable
- d** inventories
- e** non-current assets.

Internal controls

Learning objective 1

In discussing the necessary accounting procedures for buying, selling and managing assets, reference has been made to the need for controls. **Internal controls** must be included when designing any accounting system. Implementing them is a process that requires constant monitoring and updating as the business grows and changes.



Internal controls safeguard the assets of a business through the implementation of administrative and accounting procedures.

Internal **administrative** controls aim to ensure operational efficiency through management policies. Internal **accounting** controls aim to protect the assets of a business and to provide accounting records that are accurate and transparent. To achieve these aims, there are **seven internal controls**, listed in **[7.1]**, that are accepted practice within most Australian organisations.

[7.1]

Accounting controls	Administrative controls
Sound accounting practices Auditing	Division of duties Rotation of duties Physical controls Personnel policies Integrity controls

Together, administrative controls and accounting controls implemented within the business aim to:

- prevent theft and fraud
- prevent errors from being made in the first instance
- detect errors if they are made
- increase efficiency.

Internal accounting controls

Sound accounting practices

A system designed with sound accounting practices of checks and balances offers control and security over all types of accounts, particularly assets. Routine and random independent checks should be made to verify the accuracy of the accounting records and the physical location, condition and number of assets held. Larger businesses may establish control centres whereby authorised personnel supervise the level of activity to ensure there is no backlog of work or resources lying idle.

A check of accounting practices can be made by monitoring procedures laid down in the manual of accounts. The use of prenumbered source documents, a chart of accounts and comparative analysis are only three of the many sound accounting policies and practices that aid internal control in a business.

Auditing

An audit is an independent review of the business's accounting practices and procedures in order to decide whether the financial records represent a true and fair statement of the activities. Auditors check that the financial records are satisfactory, that controls are in place and effective, and that records provide accurate information to users. They must also evaluate whether the records are prepared in accordance with accepted accounting standards. Some of the testing carried out by auditors includes reconciling cash account balances with cash records, checking the condition and quantity of inventories, and verifying the amounts owed to the business by customers. Banks, other financial institutions, accounts-payable officers and potential investors rely on the auditor's report when deciding on their level of involvement and investment in a particular business.

Auditors may be internal or external to the business. External auditors are employed from outside the business and normally provide an annual audit of the accounting practices and procedures. In small businesses, external auditors may be called on only when the business is for sale or when the owner suspects that fraudulent practices are occurring.

To assist external auditors in their role, a large business could maintain an internal audit department. Internal auditors may identify deficiencies in the system and recommend and/or introduce improved designs whenever necessary. They also assist in detecting fraud and theft. This assistance will reduce the time taken by external auditors and minimise disruption to the normal activities of the business.

Internal administrative controls

Division of duties

Learning objective 2

The duties of personnel should be separated so that the work of one employee acts as a check on the work performed by another. For example, sales should be recorded by one employee, the dispatch of goods sold by another, and the receipt of the money owing to the business by yet another employee. By following this procedure, any inaccuracies should be located by at least one other person and subsequently corrected. In addition, the possibility of theft or fraud is minimised as collusion would have to happen for this to occur.

Division of duties may not always be feasible in small businesses with few employees. In small business, the onus often is on the owner to have a hands-on approach to guard against employee theft or fraud. In larger businesses that have a computerised accounting system, users may have to have a password for acceptance into the system, and specific applications can be locked and be accessed by authorised personnel only.

Rotation of duties

Rotation of duties has benefits for both the employees and the business. Employees benefit through multiskilling. Personnel are presented with various opportunities to learn the different facets of the business. The business benefits from the rotation of duties because this provides one internal control to guard against any deviations from sound accounting practices. Employees are discouraged from committing fraud if they know that another employee may soon be performing their work and consequently identifying possible discrepancies in the records. Insisting that employees take annual leave can be a catalyst for rotation of duties.

In some organisations with a computerised system, the rotation of duties may be more difficult to achieve. Users of the system tend to specialise in a particular package or module, and may have little or no knowledge and experience of other sections of the computerised accounting process. However, rotation of duties is important and should be implemented whenever possible.

Physical controls

'Physical controls' refers to safeguarding financial records and assets by using safes and secured storage areas within locked buildings, keeping keys secured, and employing surveillance equipment and/or security staff. Software, CD-ROM and/or disk back-ups and other computing equipment should be stored securely and, if appropriate, separately, to prevent theft, damage or piracy of software. It is recommended that such back-up storage of information should be off site.

Personnel policies

In any system, manual or computerised, the output is only as good as the input, and any errors in data will produce inaccurate information. Qualified and reliable personnel are needed to implement the various aspects of the accounting process. Well-trained and informed employees perform their responsibilities conscientiously and are accountable for their role in the operations of the business. Clear and concise job descriptions should be given to all employees and be updated at regular intervals.

Integrity controls

Integrity controls are designed to ensure the accounting process is properly developed and maintained. In a manual system, confidentiality of records is protected by storage in locked equipment and by restricting access of information to relevant personnel only.

In a computerised system, it is essential that authorised software be used and that the data is securely stored and accessed by authorised personnel only. In some systems, personnel who access specific information are monitored by the system to ensure that the integrity of data is maintained.

Effectiveness of internal controls

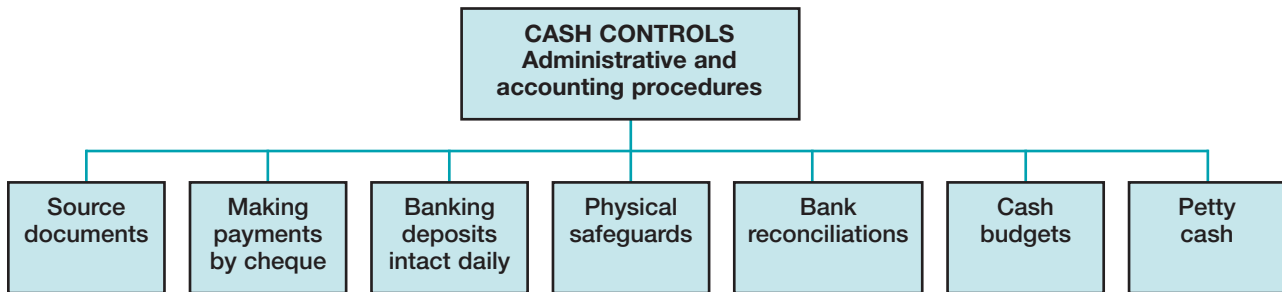
Of course, regardless of the number of internal controls implemented, the controls are only as effective as the personnel who administer them. Controls can be negated by individual action or collusion, or by computer fraud. Of particular importance are internal controls aimed at preventing one person acting alone from successfully committing fraud. If two people must collude to commit fraud, the chance of it happening is greatly diminished.

Implementing these types of controls is more readily achievable in larger rather than smaller enterprises. Division and rotation of duties are more difficult to implement when the business is small, as roles tend to overlap and personnel are often not multiskilled. Such businesses might also want to maintain a level of security by not sharing tasks or information among employees. Therefore, some jobs cannot be rotated, such as the processing of payroll in a very small business. These businesses require the owner, or a trusted manager in the absence of the owner, to play a vigilant role in safeguarding assets by monitoring employees' activities. Ultimately, the protection of assets is of paramount importance to any business.

Internal control of cash

Learning objective 3a All transactions in a business will ultimately result in the receipt or payment of cash. As cash is liquid, it needs to be safeguarded. In order to diminish the chance of misappropriation or fraud, internal controls are essential. Figure [7.2] provides an overview of these controls. Such controls are primarily aimed at preventing deviations from good accounting practices. However, they also offer detection if irregularities occur, making it difficult to conceal any fraudulent activity. In addition, internal controls protect the reputation of the honest employee.

[7.2]



The main accounting systems implemented in a business are in themselves internal controls that assist in managing cash. The process of establishing accounting records, utilising double entry and preparing a trial balance are imperative in keeping track of cash.

Specific internal accounting controls of cash

There are specific internal accounting controls which help to minimise fraud and loss in relation to cash. These include the following:

- **All cash received should generate a source document.** As cash is received, it should be promptly recorded on an official document designed specifically for this purpose. The addition of the value of the source documents should be verified with the amount of cash received.

The type of transaction indicates the form of the source document. Cash sales can be evidenced by cash register receipts, prenumbered sales dockets and sales tickets, and credit/debit card vouchers. Receipts from accounts receivable and other transactions usually take the form of a prenumbered receipt and, when cash is received by mail, an entry is recorded in a cash remittance book.

- **All cash payments should be made by cheque (except individual items paid through petty cash).** A business controls cash by making all payments by cheque. In this way, cash is safeguarded from misuse and the cheque butt acts as documentary evidence for auditing purposes. Before any payment is made, the amount owing should be verified against supporting documentation. Cheques should be crossed with 'not negotiable' and signed by a minimum of two authorised people within the business.

Cash includes notes, coins, cheques, money orders and credit/debit cards.

Specific internal administrative controls of cash

Also of paramount importance in safeguarding cash are the internal administrative controls that need to be implemented. These include the following:

- **All cash received should be banked intact daily.** No cash should be taken out of the day's receipts to pay for other expenses. This is to ensure that the actual cash-on-hand matches the documentary evidence of the cash that should be on hand. Consider for example, the effect on the cash-on-hand of allowing 'cash out' EFT transactions. At the end of each day, the total amount of cash-on-hand less the cash float should be banked.
- **All cash kept on the premises should be safeguarded.** As banking is carried out on a daily basis, only a small amount of cash, such as a float for a cash register, should be kept on the premises. Such cash (cash on hand) must be locked in cash registers, safes, vaults or, as in the case of petty cash, in the petty cash container.
- **Cancelled receipts and cheques should be kept.** Spoiled receipts and cheques are marked with 'cancelled', kept for audit purposes and filed in numerical order.
- **Division of duties of handling and recording cash should be established.** Division of duties involves the separation of tasks. First, receipts and payments should not be handled by the same person. This procedure minimises the opportunity for falsifying the records by payments being made from receipts or paying for goods/services not received. Second, the cash should be handed to the cashier who is responsible for the daily banking. The cashier should not prepare any accounting records. The accounting records should be prepared independently from the cash receipt documents by the accounts clerk, who should not have access to the cash.

Division of duties clearly separates the handling and recording of cash. Personnel who are authorised to handle the cash must be responsible and accountable for the verification of the cash records.

- **Rotation of duties of those involved in handling and recording cash should be implemented.** Periodically, duties should be rotated among employees to ensure that no deviations from sound accounting practices occur. As already explained, employees are less likely to commit fraud if they know that another employee may soon be doing their work and may thereby uncover any discrepancies in the records.

Bank reconciliations

Preparing bank reconciliations regularly is one of the primary internal accounting controls necessary in safeguarding cash. The business and the bank maintain separate sets of cash records. While the business maintains a cash at bank account in its ledger, the bank details its transactions with business in a bank statement. As the bank's records are independently prepared, they offer the business further control over cash. Theoretically, the cash balances of both sets of records should match. In reality, there may be a difference between the business's and the bank's records. Bank reconciliations ensure that the business's records and the bank's records agree.

Cash budgets

Another important tool in business is a cash budget. A cash budget consists of expected receipts and payments, and an analysis of the anticipated cash position of the business over the period of the budget. A major area of consideration for businesses who offer credit sales is analysing accounts receivable to determine when cash will be received. Once the cash components of all receipts and payments have been compiled, the resulting cash position for the period is calculated and analysis is conducted to determine what course of action needs to be taken by the business.

Petty cash

An accounting system that is also an important internal control for small amounts of cash is the **petty cash** system. Where possible, all payments should be made by cheque, electronic funds transfer or credit cards, and these amounts are entered in the cash payments journal. In the daily operations of the business, however, to pay for small items (such as bus fares or milk) by cheque could prove to be inconvenient and/or unacceptable. In these instances, it is more practical for the business to pay with cash. Rather than letting staff simply take money straight from the cash register, a system of petty cash is implemented.



Petty cash is a fund established by a business to provide cash to pay for small items of expenditure and to record these cash transactions for control purposes.

The amount in the petty cash fund will vary according to the needs, size and the type of business enterprise. Some funds may be established with a \$100 **imprest** and be reimbursed fortnightly, while others may need a \$1 000 imprest and weekly reimbursement.



The **imprest amount** is an advance from the bank account to the petty cash fund.

Petty cash advance is a current asset and is recorded in the balance sheet. It is necessary to reimburse the petty cash account in two circumstances:

- when the petty cash funds are low
- on balance day when the cash and expense account positions need to be recorded so that the end-of-period reports accurately reflect petty cash transactions.

Review & practice

1

- a Who** is responsible for the internal controls in a business?
- b What** is meant by the term 'division of duties'?
- c When** should banking be done? Why?
- d Where** should cash on the business premises be kept?
- e Why** should the duties of employees be rotated periodically?
- f How** does a bank reconciliation contribute to internal controls over cash?
- g How** does a cash budget help to control cash?

Credit facilities

Most businesses now offer their customers some form of credit facility. A credit transaction (sale or purchase) occurs when an agreement is made that goods/services can be received now and paid for at a later date. The principal benefit for businesses that offer credit facilities is that they make trading conditions attractive to potential customers. Failure to build a credit relationship with customers could result in a significant loss of business. The main reason for businesses selling on credit is to increase profitability through increases in sales. Therefore, it is important that the revenue from increased sales can also cover the additional cost of providing credit.

The provision of credit facilities can be costly to a business. Examples of additional expenses that may be incurred include:

- the cost of providing discounts to accounts receivable in order to encourage prompt payment of accounts
- additional staffing costs, such as the employment of a credit supervisor to assess a customer's creditworthiness
- increased stationery, postage and printing costs associated with sending out invoices, statements of account, receipts, letters requesting payment, and so on
- telephone expenses incurred through making credit rating enquiries and requesting payment from accounts receivable
- lost interest revenue opportunities through the business not immediately receiving the cash for investment
- bad debts resulting from accounts receivable not paying outstanding debts
- debt collection costs.

Developing a credit policy

After considering the costs versus benefits issues of offering credit facilities, a credit policy should be written and formalised as part of an enterprise's trading procedures. Consequently, a business's manual of accounts may include a credit policy section, which should outline details such as:

- ascertaining the creditworthiness of customers
- determining maximum credit limits
- terms of payment, including any discount period
- whether interest will be charged on outstanding accounts
- collection procedures for overdue accounts.

Ascertaining creditworthiness

One of the most important stages in granting credit to customers is to ascertain at the outset whether they are likely to be able to pay for any credit offered to them. If businesses research a customer's creditworthiness fully before entering into a credit arrangement, the costs associated with debt collection and bad debts can be minimised.

The article in [\[7.3\]](#) outlines several steps that can be taken to assess customers' creditworthiness, and discusses generally how to manage credit facilities offered to customers.

[7.3]

Seven golden rules of credit management

Tony Lincoln, Manager, Business

Development, Lincoln Indicators Pty Ltd

There are seven golden rules of credit management that companies large and small must follow to reduce exposure to bad debts and late payments. These are:

- 1 Actively manage your accounts receivable. As a major asset of many companies, accounts receivable needs to be monitored and kept within financially prudent levels.
- 2 Source the financial statements of your customers from the Australian Securities and Investments Commission or the customer itself. Current financial statements are the most accurate indicator of a customer's ability to pay, as they detail current cash flow position and working capital requirements.
- 3 Use customers' financial statements to understand their recent payment history. This will allow you to determine how quickly they are currently paying their bills and whether this falls in line with your own terms of credit. This information can only be gleaned from current financial statements.
- 4 Watch for customers whose payment history is changing. This could indicate a cash flow problem and a need to alter their payment conditions.
- 5 Use key accounting ratios to pinpoint customers' financial weaknesses:
 - CFBCL – cash flow before tax to current liabilities ratio: determines the ability of the customer to meet all financial commitments as and when they fall due.
 - QLCL – quick liabilities to current liabilities ratio: describes the relationship between the customer's short term financial needs, as provided by a lending institution, versus trade finance. If the customer is borrowed to the hilt with the bank, it is unlikely the bank will extend further credit to pay off debt.
 - TLTA – total liabilities to total assets ratio: gearing ratio that explains the level of total liabilities to total assets. How much of total asset base is owned by the bank? Will there be a fire sale of assets to pay debts? If the customer is borrowed to the hilt they will not be able to sell assets to pay debt, as the bank essentially owns those assets.
- 6 Once you have gained a complete picture of the financial health of the customer, decide on the appropriate risk mitigation techniques to protect your business. Common techniques include COD payment, trade bills and credit insurance.
- 7 Be firm in enforcing your terms and conditions. Your company has provided a quality product and service, and deserves to get paid in a timely manner.

Source: Lincoln, T 2002, Keeping Good Companies, July.

Review & practice 2

Read the article in [7.3] and answer the following questions.

- a **Who** should be responsible for determining a customer's creditworthiness?
- b **What** are four of the main costs associated with offering credit terms?
- c **When** should a business not offer credit terms to a customer?
- d **Where** would a business find a customer's latest financial statements?
- e **Why** should a business be firm in enforcing credit terms?
- f **How** does a business determine whether a customer is worthy of receiving credit?

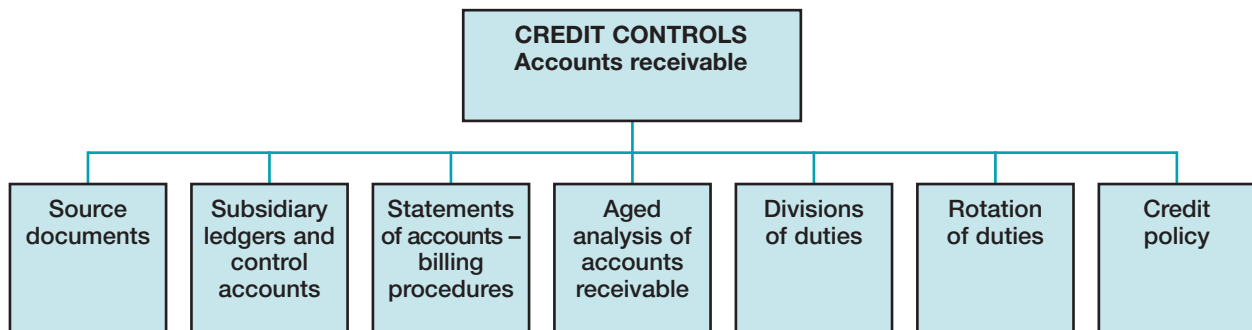
Accounts receivable

Learning objective 3b

The main purpose of a company providing credit to its customers is to increase profit from customers purchasing more goods because they can pay for the goods at a later date. Internal controls are important in this area to ensure that the business is in fact making a profit from offering credit terms and not losing money.

Controlling accounts receivable requires the business to implement a methodical system of procedures. Control procedures applicable to accounts receivable are shown in [7.4].

[7.4]



Source documents

Source documents such as tax invoices and adjustment notes are required by the Australian Taxation Office (ATO) to provide GST records, but are also an important tool for keeping track of how much credit has been given to customers. Consecutively numbered receipts should be issued to ensure cheques or direct credits received are attributed to the correct customers.

Subsidiary ledgers and control accounts

Subsidiary ledgers (such as the accounts receivable ledger) used in conjunction with a control account in the general ledger enable errors to be easily located and corrected. This is achieved by reconciling the control account balance with the schedule of accounts receivable (the list of debtors outstanding) at the end of each month. By having different staff responsible for preparing the subsidiary ledger and the general ledger, the possibility of fraud is kept to a minimum.

Statements of account and billing procedures

A statement of account is prepared from the subsidiary ledger and details the transactions involving each accounts receivable for the previous month. It is usually prepared monthly and, in order to avoid a heavy workload at the end of the month, **cycle billing** is utilised by many large businesses. Cycle billing involves statements being sent out in cycles throughout the month. Accounts receivable may be divided alphabetically into groups, such as A–F in the first week of the month, G–L in the second week of the month, M–R in the third week of the month and S–Z in the final week. Cycle billing should result in a steady flow of receipts of cash as well as providing a regular workload for the person responsible for accounts receivable.

An example of a ledger account [7.5] used to prepare a statement of account [7.6] is provided below.

[7.5]

Getcha Gear Accounts receivable ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Burmott Australia	
May 1	Balance b/d	427	10	Sales returns	139
8	Sales and GST	377	11	Bank	427
17	Sales and GST	614	30	Balance c/d	852
		<u>\$1 418</u>			<u>\$1 418</u>
Jun 1	Balance b/d	852			

Getcha Gear Accounts receivable ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Burmott Australia			
May 1	Balance b/d			427 Dr
8	Sales and GST	377		804 Dr
10	Sales returns		139	665 Dr
11	Bank		427	238 Dr
17	Sales and GST	614		852 Dr

[7.6]

Getcha Gear 24 Bayview Road Brisbane Qld 4000 STATEMENT OF ACCOUNT for the month of May 2010					
Burmott Australia Ltd 327 Pitt Street SYDNEY NSW 2000 A/c no: 37746254					
Date	Ref	Particulars	Debit \$	Credit \$	Balance \$
2010					
May 1		Balance			427
8	452	Invoice – Goods and GST	377		804
10	24	Adjustment note – Returns		139	665
11	5200	Receipt – Cash		427	238
17	498	Invoice – Goods and GST	614		852
					<u>\$852</u>
		Terms 3/7 n/30 Thank you for your custom – prompt payment is appreciated			Last amount in this column is owing
Please return this section with your payment Burmott Australia Ltd A/c no: 37746254					
*E & OE					

* E & OE – Errors
and omissions
excepted – is a
disclaimer by the
business against any
inaccuracies in the
document.

Aged analysis of accounts receivable

An important control device over accounts receivable is a list of accounts receivable, which details the length of time each debt has been outstanding. This list is known as an **aged analysis of accounts receivable** or an **ageing schedule of customer balances**. As with the statement of account, information is taken from the ledger to prepare this special-purpose internal report.



An **aged analysis of accounts receivable** is a list of accounts receivable balances classified according to the time period the debt has been outstanding.

The example in [7.7] assumes that the business trades on terms of 30 days (that is, it is expected that the balance from the statement of account will be paid in full within 30 days of the last day of the month shown on the statement):

[7.7]

Getcha Gear
Aged analysis of accounts receivable
as at 30 May 2010

Accounts receivable	Account balance \$	Current \$	0–30 days \$	Analysis of overdue accounts			
				31–60 days \$	61–90 days \$	91–120 days \$	Over 4 months \$
N Bottiglieri	328		328				
Burmott Australia	852	852					
D Carpenter	524			524			
A Couzner	822	400		422			
M Horsten	1 006			501	505		
McDonald Pty Ltd	420				145	275	
Olex Cables	366	66	300				
M Shipley	739			739			
E Turner	837						837
Total due	5 894	1 318	628	2 186	650	275	837
Percentage of total		22.3%	10.7%	37.1%	11.0%	4.7%	14.2%

The analysis in [7.7] shows that Getcha Gear has a total of \$5 894 owing from customers. The total in the 'Current' column, \$1 318, is the amount of credit that has been given to customers in May. This amount is due to be received by Getcha Gear by the end of June. May's credit sales of \$1 318 represent 22.3% of the total amount owed by customers.

The analysis shows how long each customer's debt has been outstanding in the 'Analysis of overdue accounts' section. The amount of \$628 was due to be received by the end of May and is now 0–30 days overdue because it has not yet been received. This represents 10.7% of the total amount of credit owed by customers.

The aged analysis of accounts receivable is an important tool for business because it can illustrate where problems exist in the collection policy, or show which customers are at risk of becoming a bad debt. In the report in [7.7] for Getcha Gear, a high percentage (37.1%) of amounts owned are 31–60 days overdue. This means that these amounts have been outstanding for up to 60 days, so the customers have had the goods in their possession for up to 90 days. The business must take action to follow up on these overdue accounts. The type of action to be taken would be outlined in the business's credit policy.

In summary, the preparation of an aged analysis of accounts receivable facilitates:

- monitoring of the rate at which accounts receivable are paying accounts
- analysis of the effectiveness of a business's credit policy
- analysis of the effectiveness of the person (for example, the credit manager) who collects a business's current and overdue accounts
- an estimate of accounts receivable that may prove to be future bad debts.

Computer-generated aged analysis of accounts receivable

The use of computers for accounting purposes has had a significant impact on the area of credit control for businesses. Most accounting computer packages will automatically age accounts receivable and generate an aged analysis of accounts receivable, thereby reducing the possibility of any errors being made. In addition, a computer-generated aged analysis of accounts receivable can include extra columns that contain information such as each accounts receivable's credit limit, a telephone number and contact name (to assist in efficient communication), and the total sales to date to aid analysis of the sales trend of each accounts receivable.

Businesses generally use two methods of reconciling the receipt of monies from accounts receivable with the business's records:

- *open-ended method* matches the receipt of money against the invoice to which it relates
- *balance brought forward* matches the receipt of money against the oldest balance.

Division of duties

The division of duties can be easily implemented if a different person is responsible for the general ledger and each of the subsidiary ledgers. Alternatively, each person may be responsible for one type of transaction in each ledger, such as the payment of accounts payable and recording of credit sales in the accounts receivable subsidiary ledger. This ensures that the person responsible for accounts receivable is not responsible for purchasing items, recording accounts payable and receiving money owing.

Rotation of duties

Rotation of duties is achieved by interchanging the people responsible for each of the different ledgers. Rotating duties will assist in reducing any opportunities for staff to commit fraud, as this is more difficult to do if a person is in a position for a limited period of time. In addition, it will discourage staff from becoming careless and shoddy because a decrease in performance levels will become evident during the time another person is carrying out their former duties. Finally, by rotating duties, staff are able to develop their expertise in a number of areas. This benefits both the business and the individual staff members.

Applying credit policy

It is very important that every business offering credit terms has a comprehensive credit policy. This policy must include ascertaining customer creditworthiness and establishing credit limits, payment terms, discounts offered, fees for late payment and action to be taken for overdue accounts.

Collection policies of overdue accounts receivable are often an area of difficulty for business. It is possible to outsource debt collection, but small businesses often find the cost associated with paying someone else to collect their debts outweighs the benefit of the more timely receipt of the money owed. The article in [7.8] gives advice on what to do when customers don't pay on time.

[7.8]

The cheque's in the mail

... If it all stacks up and you are prepared to trade on credit terms, then the cashflow regulation begins.

Do not allow your terms to be extended without your expressed approval and within the guidelines of your business credit policy.

Get on the telephone to slow payers immediately the debt is overdue and determine when the debt will be paid..

Making the collection calls

Preparation is essential. What information do you need?

- date of debt
- details of the outstanding debt
- terms of the account
- person to contact and phone number – prepare mentally for the call.

Overcoming objections

- Be firm, not rude, telephones are easy to hang up on.
- Be assertive, not aggressive, you don't want a fight, just a commitment.
- Always be in control of the conversation.
- Always get a commitment and an action plan.
- Do not feel embarrassed, it's your money and you have a business to run.

Good credit management

- Diligence, use an effective system and don't accept sloppy practices.
- Accounts to be always reconciled. There are debtors out there who are experts at taking advantage of slack accounting practices!
- Records should be kept up to date. Watch out for change in names on cheques etc.
- Act, don't react, if you see change, question it and get to the truth.

- Act promptly, move quickly when promises are broken.
- Don't wait and hope it will get better, it won't!

What to do if you don't get paid

- Never threaten only promise, and we keep our promises – don't we?
- Do not break a promise – ever.
- Act swiftly and decisively, use your collection agent or legal adviser.
- Do not back down – it rarely pays.
- Remain firm – remember, you may be one of many who are owed debts.
- Know and use the experts, they have seen it all before.

On occasion I hear the statement that 'If I can't collect them, then nobody can!' This may suggest that either a huge ego is evident or perhaps there exists a refusal to accept the reality that not all delinquent debts can be resolved internally.

My experience is that the internal staff of a small- to medium-sized business neither have the time, nor, in many cases the motivation, to develop the specialised skills and knowledge to effectively and economically collect all the debt by themselves.

The questions that you should ask yourself when considering outsourcing any debt are:

- What is my core activity and could I spend more time doing what I am best at?
- What is the cost of support staff chasing delinquent debt?
- What is the overall cost of slow receivables?
- Should I consider outsourcing the complete collection function?
- What is the cost impact of using an agent?

Source: Extract from Mike Howard, MICM FAIM, Queensland Business Review, August.

Review & practice 3

- Who** should be responsible for collecting outstanding accounts receivable?
- What** 'division of duties' can be implemented in controlling accounts receivable?
- When** should the collection of debts be outsourced?
- Why** should an aged analysis of accounts receivable be prepared?
- How** often should a statement of account be issued to customers?
- Prepare a statement of account from the following ledger account:

Ken's Hardware
Accounts receivable ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
			L Shirley		
Aug 1	Balance b/d	602	Aug 12	Sales returns	55
6	Sales and GST	167	15	Bank	602
27	Sales and GST	1 025	30	Balance c/d	1 137
		<u>\$1 794</u>			<u>\$1 794</u>
	Balance b/d	1 137			

Ken's Hardware
Accounts receivable ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
L Shirley				
Aug 1	Balance b/d	602		602 Dr
8	Sales and GST	167		769 Dr
10	Sales returns		55	714 Dr
11	Bank		602	112 Dr
17	Sales and GST	1 025		1 137 Dr

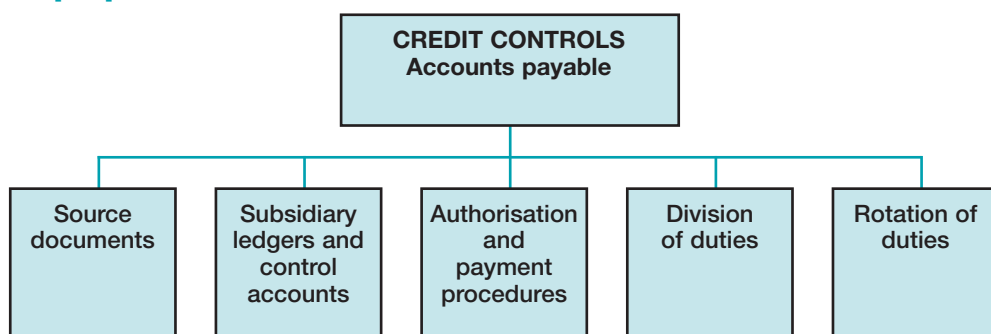
► Exercises 7.7 to 7.9, pages 407–8

Accounts payable

Learning objective 3c

It is also important to implement control procedures over accounts payable, as shown in [7.9].

[7.9]



Source documents

Source documents are essential control devices as they provide verifiable evidence of transactions. The main source documents used in credit purchase transactions are tax invoices, adjustment notes and statements of account. An added control device for accounts payable is for the business to consecutively renumber source documents to assist in the recording of credit transactions.

Subsidiary ledgers and control accounts

The implementation of subsidiary ledgers and control accounts enables errors to be more easily located and subsequently corrected by reconciling the control account balance with the schedule of accounts payable. This procedure minimises the possibility of fraud being committed by staff.

Authorisation and payment procedures

With regard to the authorisation and payment procedures for accounts payable, particular attention should be given to the following areas:

- **Discount** – Some businesses offer a settlement or cash discount to encourage prompt payment of accounts. In order to take advantage of any discount period, invoices or statements of account must be paid within the discount period. The benefits of paying accounts within the discount period can be quite significant even if the discount percentage is small. For example, if a business purchases goods to the value of \$1 000 and the supplier offers 2.5% discount if the account is paid within seven days, payment of the account within the discount period would result in a saving of \$25. Discount amounts such as this result in considerable savings over a one-year accounting period. Therefore, a business needs to implement a control device over accounts payable that ensures invoices are paid within the discount period.
- **Authorisation** – A system should be implemented that requires authorisation for any cheque issued by a business in payment of an account. The authorisation procedure should include a checking system whereby confirmation of receipt of the goods or services for which a business has been invoiced is obtained.

Payment of accounts within the trading terms will assist in building a good reputation for a business in that it will be seen to be a well-run and efficient organisation able to meet its cash commitments on time. In addition, prompt payment of accounts will ensure the continuation and possible extension of any credit facilities already in place.

Computerised accounting packages have the facility to generate automatically a schedule of accounts payable, thereby allowing managers to monitor the rate of payments by the business of its accounts payable. Monitoring of payments is important to ensure that discount periods are used advantageously and to ensure that the credit rating and reputation of the business is maintained.

Division of duties

The division of duties can be implemented with a different person being responsible for each of the general and subsidiary ledgers. This ensures that the person responsible for accounts payable is not responsible for purchasing items and paying accounts.

Rotation of duties

Rotation of duties can be achieved by interchanging the personnel responsible for each of the different ledgers. The rotation of duties assists in reducing opportunities for staff to commit fraud and also enables them to become multiskilled.

Inventory

Learning objective 3d

Inventories are items held for sale in the normal course of the business's operations, and it is via the sale of these inventories that a business generates profit. Most businesses have large amounts of money invested in inventories, so the management and control of this asset is very important. It is vital that loss, theft, spoilage and obsolescence are carefully controlled, or business profits can be almost completely negated. The control account in the general ledger and the inventory records (also known as stock cards) subsidiary ledger are both common techniques used by businesses as control mechanisms for inventories.

Inventory management controls can be divided into three main areas:

- control over storage
- control over purchasing/selling of inventories.
- security over inventories

Control over storage

Inventories can be lost through unsuitable storage conditions. These inventories become spoiled and either cannot be sold or may be sold at a considerable discount. Damaged, broken, or spoiled stock is a cost to the business that results in decreased profit.

One of the costs associated with inventories is the storage and distribution to retail outlets. Read the following article [7.10] on the action taken by Crazy Clark's.

[7.10]

Crazy Clark's 'Whiz thru Bris'

Graham Gardiner

Crazy Clark's is expanding its massive airport headquarters only seven months after the \$10 million purpose-built facility opened.

The discount retail giant will add another 5000 square metres to its 22 000 square-metre headquarters, opened last October at the airport's Export Park precinct.

...

The existing high-tech distribution and warehouse building already is the largest non-aviation premises at the airport, which features six master-planned development precincts including Export Park.

Brisbane Airport Corporation (BAC) property commercial manager Rob Mactaggart said that during construction last year Crazy Clark's had not expected to need the additional 5000-square-metre expansion for five years.

'This is the second unscheduled expansion of Crazy Clark's new airport headquarters,' he said.

'Even before construction had started last year, Crazy Clark's decided to expand by 4000 square metres to the existing 22 000-square-metre premises.

'Crazy Clark's is taking advantage of our "Whiz thru Bris" initiative to make Brisbane the most freight-friendly airport in the Asia Pacific. The company is receiving goods from around the world by air and sea and sending them out by truck to the 146 Crazy Clark's stores in Brisbane, regional Queensland and northern New South Wales.

Crazy Clark's founder Peter Clark said the company's move to Brisbane Airport City has been so successful he expected to need another 10 000 square metres in the next two years.

Source: Extract from Gardiner, G 2002, Queensland Business Review, May.

From this information, it is beneficial to draw up a 'for' and 'against' table analysing Crazy Clark's decision. Pay particular attention to the costs associated with the decision and the benefits gained from implementing this strategy.

Security over inventories

Security over inventories is needed to prevent:

- shoplifting by customers
- burglary
- pilfering by staff.

For a large trading organisation, losses through theft can amount to a sizeable and unwanted expense.

Some security methods used by firms to protect stock are:

- computerised/magnetised security tags
- surveillance cameras
- bag checks
- security staff
- dye tags
- secure warehouse storage areas
- bars on windows
- surveillance of customers by store detectives
- burglar alarm systems
- checks on customers coming into or out of the store
- special procedures for staff purchases.

Ultimately, the decision about which methods are undertaken to prevent theft in retail organisations will be a cost/benefit decision. For example, in the extreme, a large store could employ 50 extra security staff in order to undertake bag and clothing searches as customers leave the store. Losses through theft may decrease significantly, but the cost of such an undertaking would probably exceed the benefits. Honest customers might choose to shop elsewhere simply to avoid the hassle!

A business needs protection not only from the public but also from its own staff. Pilfering refers to staff who take stock illegally. Staff also need supervision to ensure that they are not giving unauthorised discounts to friends and relatives.

Control over purchasing/selling inventories

Controls over the purchase and sale of inventories include:

- just-in-time purchasing
- maintaining correct inventory levels
- control over ordering and dispatching
- control over loss through clerical errors
- monitoring turnover of inventories.

Just-in-time purchasing

The challenge for a trading business is to have the right inventories in the right place at the right time in order to maximise the level of sales. One way firms can approach the management of inventories is by applying the concept of 'just-in-time'. This has greater implications for a manufacturing firm, but can also be effectively applied to a trading business.

Just-in-time purchasing means that a minimum of inventories is held in stock and more frequent deliveries of goods is encouraged to ensure that inventories are held for a minimum period in storage before being sold.

There are a number of costs involved in the carrying of inventories:

- the costs of purchasing the inventories
- the opportunity cost of purchasing inventories (the funds used to purchase inventories could have been invested or used to buy some other asset)
- costs of storage and security, including personnel
- costs associated with damage or spoilage of stored goods
- the cost of storage space (building).

A trading firm can avoid many of the costs of carrying large items of merchandise such as whitegoods and furniture by taking orders from customers and allowing the manufacturer to dispatch the goods directly to the customer. The retailer then only has the display stock in store and costs are kept to a minimum. This approach does not apply to all types of inventories, and it is a test of experience and good management for the business to have on hand the goods required by customers.

The aim for the business is to 'get it right' – to have the right goods in the right place at the right time. This strategy will ensure that the business retains its customers and in doing so builds goodwill.

Maintaining correct inventory levels

Not all businesses will get it right all the time. If the level of inventories held is too low, it may lead to sales being lost to competitors and goodwill diminishing. A dissatisfied customer will look elsewhere for the same goods, and may decide not to give future custom to the business that was unable to supply the goods when they were first required. Ultimately, profits are lost.

Conversely, overstocking of inventories by a business will result in money being tied up in inventories and not being used to generate profit. Food items with a use-by date need to be sold well before this date. Fashion items may have a shelf life of three months after which they are often discounted to attract sales.

In an attempt to ensure the correct inventory level is maintained at all times, businesses may calculate how much inventory should be purchased at each order. One method of determining the best quantity of inventory to order is the **economic order quantity (EOQ)** method. This method calculates an order size that minimises the total ordering, shipping and storage costs over the year while maintaining adequate inventory levels.

Control over ordering and dispatching

The reorder point is a predetermined number of inventories at which ordering occurs. A business must take into consideration the time it takes from when the order is placed to when the goods arrive at the business and can be sold. This time is called **lead time**. The amount of lead time will depend on the proximity and current circumstances of the suppliers of the inventories.

Controls need to be instituted to ensure that the inventories that have been ordered are in fact received. Theft may occur during transit or when goods are checked on arrival. If controls are not effective, dishonest employees may have opportunities to pilfer goods as they are received.

Similarly, the dispatch of inventories requires owners/managers to instigate controls that ensure the correct goods are sent to the customer at the correct time and place.

Control over loss through clerical errors

Staff may contribute unknowingly to a decrease in profits through clerical errors involving stock – for example, incorrectly pricing stock, giving incorrect change, or inadvertently charging a customer for less stock than the customer receives. Errors, no matter how small, can accumulate to represent a significant cost to a business.

Monitoring turnover of inventories

Inventories should be sold (turned over) as quickly as possible. The quicker the rate of turnover, the greater the opportunity to make profits.

The stock turnover rate measures how many times during the period the average number of inventories has been sold. It is calculated by dividing the cost of goods sold for a period by the average inventory for the period.

EXAMPLE

A business's cost of goods sold for a year is \$100 000. Average inventory ((opening + closing inventory) ÷ 2) is \$20 000. The stock turnover rate is 5, which means the firm has been able to turn over the average inventory five times in the year ($100\,000 \div 20\,000 = 5$).

To express the stock turnover rate as a time period in which the average inventory is held, the days of the year are divided by the turnover rate ($365 \div 5 = 73$ days). The average inventory is therefore sold every 73 days. The information gained by calculating this ratio is useful to a firm if it can be compared to last year's stock turnover rate, the rate of a competitor, or an industry average.

Stocktake of inventories

A business must perform, at least annually, a physical count (stocktake) of all inventories on its premises. To be effective, the stocktake needs to be well organised and well supervised. To organise the stocktake:

- stocks need to be arranged in like items for convenient counting
- stock sheets with a list of the names of the stock items to be counted should be prepared prior to the stocktake to facilitate easy counting
- detailed instructions need to be provided for those who will be performing the actual count of stock
- adequate supervision is required to ensure errors are minimised
- counts of some items are spot-checked by supervisors to ensure accuracy
- attention to movements of stock just before or after the stocktake is important.

A cutoff point is established after which stock is frozen.

The accuracy of the stocktake is very important. For some large organisations, an auditor will be present at the annual stocktake to observe procedures, effectiveness and accuracy. A small business owner may complete a regular monthly stocktake if the stock is of a type that can be counted in a couple of hours. The manager ensures not only good control over the stocktake, but is able to monitor inventory levels. Any deterioration in stock or poor storage conditions contributing to spoilage can be addressed.

Stocktaking involves a considerable time commitment for a large business. The major cost involved in a stocktake is wages, which often have to be paid at overtime rates. Trading within the business may be suspended for a short period, causing some disruption in trading and possible loss of sales during this time.

Perpetual versus periodic



Businesses may choose between two main types of inventory accounting methods: periodic or perpetual. The perpetual inventory system is where a running total of the firm's inventory is kept. In the past, this system was predominantly used by businesses in which the loss of even one item of inventory would have a significant impact on business profits, such as car yards. However, the implementation of computers now makes this system viable for most businesses, and provides a more accurate method of controlling inventory.

The comparison in [\[7.11\]](#) between the two methods of accounting for inventory gives some indication of the applied controls in each method.

[7.11]

Comparison of the perpetual and periodic methods of inventory control

	Periodic method	Perpetual method
Inventory account	An asset account. Does not reflect changes in inventories due to sales and purchases throughout the period.	An asset 'control' account in the general ledger. Summarises the movements of all inventories during the period.
Value of inventory on hand	Value of inventory on hand cannot be ascertained unless a stocktake is carried out or the retail inventory method is used to estimate the closing stock at its cost price.	Gives a value for inventory on hand at any time through the inventory control account.
Stocktake	Physical stocktake is necessary to ascertain closing stock value which can be used in the calculation of the cost of goods sold and gross profit.	Physical stocktake is only necessary to confirm the number of items on hand as recorded on the stock card.
Discrepancies in stocktake	Discrepancies are not recorded. The periodic method assumes that all goods not counted in the physical stocktake have been sold.	Any variance between the recorded number of inventories and the actual number of inventories determined by the stocktake are identified. An inventory adjustment account records any discrepancy. An unfavourable variance is called a 'shortage' and a favourable variance is called a 'surplus'.
Inaccuracies in stocktake	There is no way of checking what is in stock with what should be in stock, so errors in stocktake counts may occur.	Stocktake figures can be checked with the balance of stock maintained in the accounting records. If there is a large discrepancy, items can be recounted and errors reduced to eliminate discrepancies.
Cost of goods sold	Calculated using a formula: Opening inventories + purchases + buying expenses – closing inventories. (In the periodic method, the cost of goods sold cannot be ascertained unless a stocktake is performed to count and value the closing inventory.)	The cost of goods sold is always available in the perpetual method. An account for cost of goods sold in the general ledger records the cost of the sales as they are made. (The individual stock cards record the cost of items as they are sold.)
Interim financial reports	Only possible if a stocktake is performed unless the retail inventory method is used to estimate the value of closing inventories.	Able to be prepared at any time during the period. Cost of goods sold is always available in the general ledger. This system is not dependent on a physical stocktake to determine profit.
Control over inventories	Limited control is provided by the periodic method. A periodic stocktake is a measure of control provided by this accounting system but in some businesses may be performed only once or twice a year.	Control over inventories is a distinct advantage of the perpetual method of accounting for inventories. Control is provided by having a continuous record of goods as they come into and go out of the business. A record of what inventories should be in stock is provided by the system. The stocktake confirms this figure and any discrepancy can be identified. A continuous record assists with the management of inventories. Reordering can be done when an item of stock reaches its reorder point.

Review & practice 4

- a **What** procedures can be implemented to control accounts payable?
- b **When** should a stocktake be conducted? Why?
- c **Where** should inventory be stored?
- d **Why** do businesses have a 'sale'?

► Exercises 7.10 to 7.22, pages 408–10

Non-current assets

Learning objective 3e Non-current assets are those assets acquired by the business for the purpose of earning revenue, rather than for the purpose of resale. Some of these assets are often called 'property, plant and equipment' and are usually kept for longer than one accounting period. These assets come at a considerable expense to the business, so they require adequate controls to be implemented to protect them.

A suitable control system includes procedures addressing the following issues:

- purchasing of assets
- administrative controls
- property, plant and equipment register.

Purchasing of assets

As non-current assets are usually large outlays for any business, control procedures need to be established to secure the best purchase in terms of value for money, as well as suitability and lifetime running costs. Large corporations have departments devoted to purchasing the company's assets. Although small businesses will not go to this extreme, literature is available to assist them in making the correct purchasing decision. The Queensland government has many guides available, one of which is *Value for money*, which gives advice on how to achieve value for money when purchasing assets. This guide recommends that the real cost of purchasing assets must be determined. This involves calculating the whole-of-life costs, transaction costs and the non-cost factors.

See
<www.qgm.qld.gov.au>.

Whole-of-life costs include elements such as:

- acquisition costs
- operating costs
- maintenance costs
- alteration/refurbishment costs
- support costs
- disposal.

Transaction costs include all elements such as planning the purchase, selecting suppliers and ordering/paying for purchase.

Non-cost factors include considerations such as:

- fitness for purpose
- technical and financial issues
- the benefits to be obtained from the purchase
- availability of maintenance and support.

When all of these factors have been considered, the business then needs to decide how the purchase of the non-current asset will be financed. There are several options when making large capital purchases, including:

- debt financing, such as taking out a loan from a bank
- equity financing, such as the owner/s contributing cash
- leasing, which is when someone else owns the asset and the business pays a monthly fee to use it.

The financing decision will be largely affected by the business's cash flow, and will often involve the assistance of a financial adviser who can assess the best option for the business.

Administrative controls

There are several administrative procedures that can help reduce theft and loss of non-current assets. These are outlined in [7.12].

[7.12] Administrative controls for reducing theft and loss

Administrative control	Description
Identification of assets	Serial numbers can be recorded and engraved on items
Documents and titles storage	Guarantees, receipts and titles should all be stored safely and in a manner that enables documents to be located easily
Asset storage and security	Appropriate protection such as locks, alarm systems and security personnel should be introduced
Maintenance program	Non-current assets should be regularly serviced and repaired to ensure the asset value is kept at the highest level possible
Insurance coverage	Appropriate insurance for the value of the asset should be assessed annually
Disposal	Procedures to obtain the best possible selling price should be an integral part of the business's policies

Property, plant and equipment register

Property, plant and equipment are valuable resources to any enterprise, so the control of them is important. Principally, the control aspect serves to protect honest employees and identify those responsible for theft, misuse or errors of judgment.

A suitable control system would include procedures involving the following issues:

- purchasing of assets
- identification of property, plant and equipment
- property, plant and equipment register
- control accounts
- documents and titles storage
- asset storage and security
- maintenance program
- insurance coverage
- review procedures
- disposal of assets.

These details are recorded in one comprehensive record called a property, plant and equipment register.

The preparation of the property, plant and equipment register is covered in chapter 5.

Purchasing of assets

As property, plant and equipment are usually large outlays for any business, control procedures need to be established to secure the best purchase in terms of price as well as suitability. Therefore, several questions need to be addressed.

- Who carries out the initial investigation into the most suitable asset, from the point of view of costs versus benefits?
- Can the equipment be viewed working elsewhere prior to purchase?
- What problems have other users experienced?
- Does a guarantee come with the equipment?
- Is the guarantee viable?
- How long is its useful life?
- How long has this supplier been in business?
- What are the expected running costs, both in terms of maintenance and operation?
- How is the asset presently being used for a particular task going to be disposed of at the appropriate time?
- To whom is this information given, and who is responsible for the final decision-making?

Identification of property, plant and equipment

Identification of property, plant and equipment can be achieved through various methods such as recording serial numbers on machines and engines, registration for vehicles, and postal addresses and numbers for property. Furniture items and the like may need to have a system devised that facilitates the identification of each item to eliminate any confusion. The issue of how to distinguish one asset from another is important, particularly if assets are of a similar nature (such as industrial sewing machines).

An identification system is also needed for recording faults, maintenance and repairs, and for tracing the location of the assets, and if the correct number of assets are held on the premises. As it is clear that not all items have their own means of identification, businesses often devise and implement their own system and apply this to all property, plant and equipment. This may be necessary for consistency.



Review & practice 5

- a **What** administrative procedures can be implemented to control non-current assets?
- b **When** should a property, plant and equipment schedule be created and updated?
- c **Where** should non-current assets be kept?
- d **Why** is it important to consider 'whole-of-life' costs when purchasing assets?

► Exercises 7.23 to 7.26, pages 410–13

Understandings

- Internal controls are an integral part of discharging accountability.
- To diminish the chance of fraud, internal controls must be implemented to ensure that one person acting alone cannot successfully commit fraud.

Cash

- Cash is a very important asset, as eventually all transactions will result in the receipt or payment of cash, and it is the asset which is most easily stolen.
- All receipts of cash should be banked intact.
- Electronic transactions involving bank credit and debit cards (e.g. Visa and MasterCard) result in a cash transaction.
- All payments should be made by cheque, electronic funds transfer or corporate cards except those small enough to be paid through petty cash.
- An important internal control is that, at regular intervals, a bank reconciliation should be prepared to compare the business's records with the bank's records (bank statement).
- A cash budget is an important control device.

Credit

- Credit transactions are based on the concept of buying something and paying for it later. This gives rise to the terms 'accounts receivable' (debtors) and 'accounts payable' (creditors).
- The main reason that firms sell on credit is to increase profitability. They try to ensure that the revenue from increased sales is greater than the cost of providing the credit.
- The main costs of providing credit include cash discounts, staff, stationery, printing, telephone and bad debts, as well as the cost of not receiving the cash immediately and hence not investing it to earn interest.
- The main documents used for credit transactions are tax invoices, adjustment notes and statements of account.

- It is important that adequate controls be kept over accounts receivable. The business should have a credit policy to try to ensure that credit is only extended to people who will ultimately pay that debt. The business should also be trying to minimise the time taken for accounts receivable to pay their debts.
- An important control over accounts receivable is the aged analysis of accounts receivable where the debts owed are aged as current, 30 days, 60 days, 90 days, and over 90 days. For each of these overdue levels, appropriate recovery procedures should be implemented.
- The firm should aim to collect information about its potential accounts receivable. It must decide whether to allow the accounts receivable to use its credit facilities, including the granting of a credit limit and the terms of trade. It must then ensure that each accounts receivable is monitored to ensure that debts are paid on time and action taken if payment is not received.
- Controls must be implemented over the accounts payable. Payments must be made on time with discounts taken if possible. This will maintain the firm's reputation for prompt payment. Equally important is ensuring that payments are properly authorised.
- For greater control over accounts payable in organisations with computer systems, two entries can be recorded. When the bill arrives (e.g. a bill from a telephone company), the entry is made to create the liability: Telephone Dr, Telephone company Cr. When the cash is paid, the liability is reduced by the entry: Telephone company Dr, Bank Cr.
- Control accounts and subsidiary ledgers are commonly used with accounts receivable and accounts payable.

Inventory

- Inventories are items held for sale in the normal course of the business.
- Inventories are an integral part of profit determination for a trading business.
- Because businesses have a considerable investment in inventories, adequate controls must be implemented to prevent theft and loss.
- Inventories should be turned over as fast as possible. The faster the turnover, the greater the opportunity to make profits. Turnover of inventories is calculated as:

Cost of goods sold

Average inventories

- The quantity and quality of inventories is important; businesses try to have the right goods at the right place at the right time.
- The level of inventories held by a business should not be too high. If goods are not selling, then money is being tied up and not being used to generate profit. This is why many businesses have a sale – to convert slow-moving inventories to cash so that new inventories can be purchased for resale.
- The level of inventories held by a business should not be too low, otherwise sales will be lost to competitors and goodwill will diminish.
- To control the purchase of inventories, a reorder point is established.
- A reorder quantity is the number of inventories that will be ordered when the inventory level falls to the reorder point.
- Lead time is the amount of time it takes from when a business places an order for the goods to when the goods actually arrive.
- Economic order quantity (EOQ) and just in time (JIT) are concepts relating to inventories.

- Every trading business should conduct a stocktake at least once a year.
- A business has a choice of two inventory systems – periodic and perpetual.
- The control account and subsidiary ledger technique is commonly used. Stock cards are the subsidiary ledger.

Non-current assets

- The term ‘property, plant and equipment’ is used to describe those non-current assets acquired by the business when the intention is not one of resale. Such assets are used within the operations of the business to earn revenue and are generally kept for longer than one accounting period.
- When considering the acquisition of an asset, financing and leasing options are examined.
- Because of the large expenditure involved in the purchase of non-current assets, adequate controls must be maintained.
- A most important control is the property, plant and equipment register. This is an example of the concept of control accounts and subsidiary ledgers.

Exercises

★ 7.1 Internal controls

List the aims of internal controls in a business. Explain some of the reasons why these aims may not be met, even though controls are in place.

★★ 7.2 Cash

‘All transactions in a business will ultimately result in the receipt or payment of cash.’
Based on your studies in accounting, explain this statement.

★★ 7.3 Internal controls

C Jackson owns and manages a small boutique and employs two staff on a part-time basis. Select any internal controls which could not be applied to Jackson’s business and explain your decision.

★★★ 7.4 Internal controls



As the newly employed accountant for L Crowthers, you receive the following memorandum enquiring about cash controls. You are required to reply to the memorandum in the same format.

INTEROFFICE MEMORANDUM

TO: A ROMANOS, ACCOUNTANT
FROM: L CROWTHERS, MANAGER
DATE: 27 NOVEMBER 2010
SUBJECT: CASH CONTROLS

At present, the practice is to take cash from the receipts of the day to pay for any items of expenditure incurred. The remainder of the cash is then receipted and banked. Although this is convenient, I am not sure if it is the best policy.

Please investigate this matter and let me know your recommendations.

LC

★★★ 7.5 Internal controls



See also chapter 3,
exercise 3.43, page
258.

Terri Maker owns Merry Music Makers, a music store, and employs an accountant, an accounts clerk, two cash register operators, and a part-time sales assistant. Ms Maker was very pleased with the profits being made, but was concerned that her cash position was declining to the point that she needed a bank overdraft to continue meeting her commitments. After analysis of the cash procedures undertaken in her business, she explained the current practices:

- a** The cash register operators totalled the cash they received for the day and passed the cash and the receipts to the accountant. The accountant recorded the receipts in the cash receipts journal.
- b** Any cash received by mail was recorded and receipted by the accountant in a cash remittance book.
- c** The accounts clerk was given the money at the end of the day with a deposit slip already completed by the accountant. If the accounts clerk was too busy, he would lock the cash in the safe for the night and go to the bank whenever he could the next day.
- d** On Friday, the part-time sales assistant would be paid in cash from the cash register. Other employees would be paid by cheque or direct deposit.
- e** As soon as any invoices were received, the accountant would place them in a folder. At the end of the month, the accountant had the authority and proceeded to prepare and sign the cheques.
- f** The accounts clerk kept a petty cash system for small payments. On the rare occasion that the fund did not balance, money was transferred from the cash register to the petty cash fund.
- g** Each month a bank statement was received and the accountant was responsible for the reconciliation process. The accountant then informed Ms Maker of the cash position of the business.

As Ms Maker's auditor, state which controls (or procedures) need to be maintained and which could be improved. Explain why these changes are recommended. Prepare your answer in letter format and provide any additional information.

★★ 7.6 Credit facilities



Using the article [7.3] as a guide, write in well-structured paragraphs an outline of the controls you would implement in order to minimise bad debts in a business.

★★ 7.7 Aged analysis of accounts receivable

The preparation of an aged analysis of accounts receivable is a time-consuming activity. Write a paragraph detailing the necessity for the preparation of an aged analysis of accounts receivable.

★★★ 7.8 Aged analysis of accounts receivable

See also chapter 4,
exercise 4.40, pages
309–10.

The information below was extracted from the ledger of J Korman.

- a** Prepare an aged analysis of accounts receivable as at 31 May 2010.
- b** Enter the information below on a spreadsheet and present it in graphical form.
- c** Incorporate the graph into a report that comments on the credit policy of J Korman.

Account name	Ledger balances					
	31 May 2010	30 Apr 2010	31 Mar 2010	28 Feb 2010	31 Jan 2010	31 Dec 2009
	\$	\$	\$	\$	\$	\$
W Conway	328	96		288		
R Day			427	100		
First Base Computers	400	329				
S Hawley	521	100				
Love & Son					216	533
J Olive		499	200		524	
S Shipstone	825		310			

★★ 7.9 Accounts receivable control

Getcha Gear does not have a formalised credit policy and does not operate subsidiary ledgers. In addition, the owner of Getcha Gear, Elle, has only been operating the business for a period of six months. The current procedure regarding outstanding accounts requires her to phone the accounts receivable when the account is two months' overdue. Elle's rationale for this procedure is that, in order to build a client base, the accounts receivable should not be harassed to pay outstanding accounts.

Based on the data in the aged analysis of accounts receivable in [7.7], and using the information in the article in [7.8], write Elle a report discussing the controls she has over her accounts receivable and outlining recommendations for improvement.

★★ 7.10 Control over accounts payable



Create a mind map of accounting and administrative controls over accounts payable.

★ 7.11 Inventory management controls

Use tabular form to sort the following list into:

- | | | | |
|----|---|-----|---|
| i | controls over storage of inventories | iii | controls over purchasing of inventories |
| ii | controls over security of inventories | iv | controls over selling of inventories. |
| a | A computer retailer installs air-conditioning in the inventory storage area. | | |
| b | Steel posts are erected in front of the plate-glass shop window to prevent 'ram raiding' of inventories. | | |
| c | A security patrol is employed to check the premises randomly throughout closing hours. | | |
| d | Staff must present identification when claiming a staff discount. | | |
| e | All meat pre-cut in the deli and still on display at the end of the trading day is wrapped in plastic and refrigerated overnight. | | |
| f | Customers are asked to present their bags for checking as they leave the store. | | |
| g | Incoming invoices are not paid until checks have been made that all stock on the invoice has arrived. | | |
| h | Staff require keys to cabinets in order to take out jewellery to show to customers. | | |
| i | All goods inwards must be signed for when they arrive by carrier. | | |
| j | Store detectives are employed to detect shoplifting. | | |
| k | Signs are placed outside certain storage areas of the store which indicate that only staff may enter. | | |
| l | Numbered tickets to indicate garments taken into change rooms are distributed as customers enter. | | |
| m | Staff are required to request a supervisor to correct any errors at the checkout. | | |
| n | Sales staff identification is keyed-in when recording a sale on a register. | | |
| o | A docket is required when returning goods to a store. | | |

See also chapter 5,
exercise 5.20,
page 336.

★ 7.12 Inventory management controls

Explain the consequences of a business carrying too little or too much stock.

★★★ 7.13 Inventory management controls



You are employed as a consultant for a firm that trades in specialist chocolates. The firm is having problems with its inventory management. The manager feels that customers are being lost due to lengthy delays in getting goods required into stock.

A lead time of eight weeks has been the accepted firm policy. Back-orders for goods have mounted to such an extent that they outnumber the orders received the previous month.

The firm also has a policy of keeping minimum stock on hand at any one time in order to avoid spoilage.

Prepare a report to the manager of this firm outlining the areas of concern and make recommendations for overcoming the firm's problems in regard to inventory management.

★ 7.14 Inventory management controls



Use your own experience, either as a customer or employee of a trading business, to make a list of any inventory management controls that you have seen in operation.

★ 7.15 **Inventory management controls**

Describe some procedures a trading business can put in place to ensure that clerical errors are minimised.

★ 7.16 **Turnover of inventories**

Explain the importance to a trading business of inventory turnover levels.

★ 7.17 **Turnover of inventories**

a Using the figures below, calculate the average inventory and the turnover of inventories:

	\$
Opening inventory	5 000
Closing inventory	4 000
Cost of goods sold	3 000

b Using the calculation from part **a**, explain what the figure for turnover of inventories represents.

★★ 7.18 **Turnover of inventories**

From the following information, calculate the average inventory and the turnover rate of inventories for the year:

Date	Cost of goods sold	Stocktake value
2009	\$	\$
July	24 000	16 000
August	30 000	20 000
September	26 000	14 000
October	29 000	20 000
November	21 000	16 000
December	33 000	13 000
2010		
January	19 000	28 000
February	24 000	23 000
March	25 000	20 000
April	22 000	18 000
May	24 000	23 000
June	21 000	18 000

★★★ 7.19 **Turnover of inventories**



Critically evaluate this statement:

'Time spent analysing inventories is time wasted on past events. Time is more effectively spent on managing the present and future sales of inventories.'

★ 7.20 **Stocktaking (perpetual method)**



Although the perpetual method of accounting for inventories is used, a stocktake is still required. Explain the necessity for a stocktake in the perpetual method.

★★ 7.21 **Stocktaking discrepancies**

A stocktake often reveals discrepancies between what should be in stock (accounting records) and what is in stock (stock count).

- List some reasons for these discrepancies.
- How do businesses account for such discrepancies?
- Suggest ways in which discrepancies between the recorded stock and the actual stock can be minimised.

★★★ 7.22 Stocktaking discrepancies

You are an assistant accountant in a large trading business. The business uses the periodic method of accounting for inventories. You have a concern regarding discrepancies and have extracted from the past year's records the following information:

STOCK COUNT – SUMMARY OF UNFAVOURABLE DISCREPANCIES		
Date	No. of items	Value
2010		\$
March 31	40	300
June 30	55	450
September 30	95	899
December 31	155	1 487

Prepare a report to the accountant outlining your findings and your concerns, and speculate on the reasons why stock discrepancies are increasing. Make any recommendations you feel are warranted.

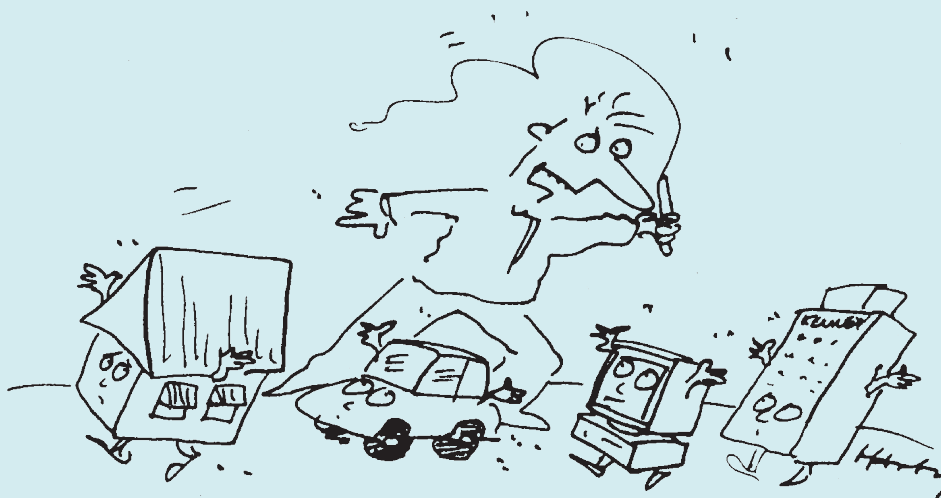
★★ 7.23 Controls – non-current assets



Timothy Perkins has a small yet busy business. He likes to treat his staff as family members and lends his employees money when needed. In addition, staff borrow tools, computers and equipment from time to time. One staff member has taken home a computer so that she can do some work at home to assist Perkins.

At the end of the financial year, auditors wished to verify that the non-current assets stated in the financial records agreed with the non-current assets actually in the small business. The auditor found this an impossible task, as she could not ascertain what items should be in the business. When the auditor found non-current assets on site, like items were indistinguishable. As Timothy's adviser, respond to the auditor's findings.

★★ 7.24 Non-current assets



- What issue in accounting is the cartoon strip addressing?
- What impression is the reader given about the issue from the cartoon strip?
- Is the impression given valid? Explain your answer.

★★★ 7.25 Controls over cash and inventories



You are an accountant employed as an independent consultant by Harbour Town Trading. The owner has previously sent you via email the following materials:

- the firm's credit policy
- a copy of the Ageing of Accounts Receivable Schedule prepared by the credit clerk
- the business's application for credit form.

You have been asked to *critically evaluate* the credit policy of Harbour Town Trading in conjunction with the schedule of accounts receivable prepared by the credit clerk and the application for credit that businesses submit when they wish to operate on credit. Present your analysis in an informal report.

HARBOUR TOWN TRADING

Credit Policy

Introduction

The purpose of this document is to provide specific guidelines and procedures for the staff of Harbour Town Trading who are charged with the responsibility of ensuring that the credit facility offered to our customers is well managed.

Credit approval

Before being granted credit facilities, potential credit customers shall be required to complete an APPLICATION FOR CREDIT document. This document is attached. Once completed, the credit clerk will determine the credit to be granted to the customer.

When an Application for Credit has been successful, customers will be given an internal credit rating based upon the assessment of their creditworthiness. This rating will be used to set a limit on the value of each account's overall credit limit. The following ratings and credit limits should be applied:

AAA	\$ 2 000
AA	\$ 1 500
A	\$1 000
B	\$500

Overdue accounts

Interest will be charged on any amount after it has been outstanding for more than four months. Interest will be charged at a rate of 32% per annum on a monthly basis.

Billing and collection procedures

It is the responsibility of the credit clerk to ensure that statements are sent in the first week of each month. The credit clerk is also responsible for processing all cash and cheques received from customers.

Reports

The credit clerk is responsible for preparing the Aged Analysis of Accounts Receivable report each month. This report is to be discussed with the owner and any necessary action taken to facilitate the collection of outstanding debts.

The following report was prepared by the Credit Clerk and presented today, 2 July 2010.

Harbour Town Trading Ageing of Accounts Receivable as at 31 July 2009

Customer	Credit	Balance rating	Current due	Overdue accounts			
				30 days	60 days	90 days	90+ days
E Simpson	A	400				400	
J Charles	AAA	1 400				1 200	200
J O'Connor	B	1 400				800	600
Bolter Pty Ltd	B	2 145	250	700	500	695	
J Cowell & Co.	A	300		100	200		
Bowson & Neilson Co.	A	2 400	1 200	600	200	400	
Total due		8 045	1 450	1 400	900	3 495	800
% of total due		100%	18.02%	17.40%	11.19%	43.44%	9.94%

Business Application for Credit**• Harbour Town Trading**

Full trading name of **business** applying for credit:

PART 1: PERSONAL INFORMATION

Home Address: _____ State: _____

Marital status: _____ No. of and ages of dependants: _____

PART 2: CHARACTER REFEREES

Name three personal referees:

1 _____

2 _____

3 _____

PART 3: AUTHORISATION

I wish to apply for a credit facility with Harbour Town Trading. I certify that the above information is complete and accurate.

Signed: _____ Dated: _____

PART 4: FOR OFFICE USE ONLY

Approved Credit Rating: _____

Approved Credit Limit: _____

Recommended: _____ Approved: _____

★★★ 7.26 Controls – inventories



A client, Thelma Senior, owner of Imperial Trinkets and Gifts, of 333 Kingsley Terrace, Mackay, has written a letter asking that you evaluate her income statement figures over the past two years. She is concerned about a seriously downward profit trend.

Thelma presents you with the following reports for the years ended 2009 and 2010:

Imperial Trinkets and Gifts

Income statements for the years ended

	30 June 2009	30 June 2010
Sales	150 000	150 000
Less Cost of goods sold:		
Inventory (opening)	20 000	32 000
Purchases	48 000	48 000
Customs duty	4 000	4 000
	<hr/> 72 000	<hr/> 84 000
Less Inventory (closing)	<hr/> 32 000	<hr/> 12 000
	<hr/> 40 000	<hr/> 72 000
GROSS PROFIT	110 000	78 000
Less Expenses:		
Overheads	29 000	29 000
Wages	41 000	41 000
Net profit (loss)	<hr/> \$40 000	<hr/> \$8 000

You make an appointment with Thelma to investigate her accounting and management controls over inventories. You make the following notes while you conduct the interview with Thelma.

- Inventories are stored in an adjacent shop that is rented by Thelma.
- Inventories are stored near windows in the workshop, which has no window coverings, and so are subject to the elements of the weather.
- Inventories are stored in their original cartons, and there is little room to move in the workshop due to the number of inventory items being stored.
- All staff have access to stock.
- When stock arrives in the store, it is simply put into the storeroom and put out on to the shelves when someone on staff has time available.
- Thelma feels that customers should be able to peruse the merchandise without the fear that they are being watched, either physically or electronically.
- Staff are able to record any purchases themselves when they leave the store each afternoon.
- Customers often come into the store and want items of stock that the shop had last week but has sold out of this week. Thelma refuses to record orders for customers, as they often fail to come back to collect the orders and the business is left with unwanted stock.
- Thelma tends to use her experience of the business when it comes to the number of inventory items to order.
- New staff 'learn the ropes' in the shop by watching other staff.
- Thelma is often not on hand, as she has other business interests. She leaves control of the business in the hands of any of the staff, as she feels that if she has employed them, then they can be trusted.
- Thelma operates a computerised accounting system, but she hasn't had the time to set it up so that it records inventory coming and going.
- Stocktakes are done every year, but Thelma finds that the time required to do it properly is too disruptive of the business. She often hurries her employees to get the job done as quickly as possible, so that the store doesn't have to be closed for more than half a day.

Having investigated Thelma Senior's retail business and business practices, you should now be in a position to offer some advice about controls in the business. Prepare a report assessing the current situation, and make recommendations that Thelma can implement that will improve her income statement in the next accounting period.

RC6

E-business

- Nature of e-business
- Benefits of 'e' in business
- Levels of 'e' in e-business
- Establishing an e-presence or an e-business
- E-commerce – the process
- Accounting for online transactions
- Issues with trading online
- Trust and online transactions
- Controls to protect against risks
- Online marketing
- B2B: Business to business
- Further sources of information on e-business

Chapter

8



E-business

Already know

- The complete accounting process from source documents to financial reports

Need to know

- The nature and benefits of electronic business (e-business)
- The impact of electronic business on accounting
- What B2C (business to consumer) entails, including the use of online stores
- How e-businesses are set up, and how online trading takes place
- What B2B (business to business) entails, including e-procurement and supply chain management
- The inherent risks, controls and security issues associated with engaging in e-business, and the importance of trust in online transactions

Using this knowledge

- *Provides information for decision-making* – businesses have the opportunity to utilise e-business options, but need all relevant information. The Internet can provide a large volume of information that can be utilised by businesses in managing their e-business transactions as well as other issues, such as supply chain management
- *Discharges accountability* – with the introduction of a new method of conducting business, all parties involved with the transactions need to be aware of who is responsible for what duties so that security and validity of information are maintained

ACCOUNTING VOCABULARY

B2B (business to business)

B2C (business to consumer)

B2G (business to government)

C2C (consumer to consumer)

E-business (electronic business)

Online store

Supply chain management

Learning objectives

After completing this chapter, you should be able to:

- 1 describe the nature of e-business
- 2 describe the benefits of e-business
- 3 outline what establishing an e-presence or an e-business entails
- 4 describe the process of online trading
- 5 discuss the impact of e-business on accounting
- 6 discuss relevant issues when faced with trading online
- 7 discuss the issues that threaten trust in online transactions
- 8 explain the controls needed to protect against risk of security breaches associated with engaging in e-business

- 9 discuss the methods of marketing an e-business
- 10 outline what B2B (business to business) entails, including e-procurement and supply chain management.

Nature of e-business

Learning objective 1

The use of computer technology has changed the way business is conducted. The nature of business today involves the use of computer technology and, particularly, the Internet. E-business uses available technology to improve business processes, attract more sales and/or provide better service. E-business can be conducted via the Internet with little or no face-to-face contact between the provider and the consumer. The Queensland government guide for small businesses advises that:

Electronic technologies will continuously and progressively be deployed throughout the entire supply chain of all industries over the next decade. It is expected that e-Business will become so commonplace, that the 'e' will become redundant and it will be 'business as usual', but conducted through a whole new medium.

Source: <www.business.qld.gov.au>.



E-business is the use of electronic telecommunications to engage in the exchange of products and services.

The term 'e-business' is often used interchangeably with 'e-commerce'. **E-commerce** is distinguishable from e-business, as it refers to online business transactions. E-business is the broader term meaning the use of technology of some type in business (which may or may not involve online trading or electronic service delivery). E-business is a rapidly evolving method of conducting business and is available to all industries. The widespread availability of e-business to business and consumers alike is largely due to the affordability of and ease of access to technology – in particular, the Internet.

Government websites provide comprehensive and current information about e-business and advise businesses on Internet usage. The e-business guide at <www.e-businessguide.gov.au/understanding/e-business/what_is> provides a list for businesses to check whether or not they are engaging in e-business. If a business is doing any of the following, then it is engaging in e-business:

- communicating with customers, clients or suppliers via email
- sending emails to other businesses to order products and services
- selling products or services via a website
- using the web to find information such as prices, phone numbers, reviews of products
- using the web for research, such as the latest industry trends
- using a website to provide information about products and services
- using a website as a means of managing the information in a business
- using the Internet for online banking and/or paying bills using BPay.

There is really no reason to separate the 'e' for 'electronic' and 'business'. In fact, the 'e' for 'electronic' is becoming somewhat unnecessary – 'e-business' IS business!

B2?

Online transactions are accepted practice between businesses and consumers and are described by the acronym B2C (business to consumer). Similarly, business to business is B2B, and transactions between businesses and governments are B2G. Individuals also deal with the government online using e-tax returns, so that means C2G, or consumer to government. eBay is an example of a further source of e-business transactions – consumer to consumer (C2C). It would appear that electronic transactions have transfigured this period of time when an acronym was needed to describe the ‘brave new world’! Business now incorporates technology; at whatever level – email only, online banking only, website only, or even simply by having a business’s contact information mentioned on an infosite (<www.ourbrisbane.com>) or portal, a web page with an e-catalogue, or full online trading – this is business today.

Benefits of ‘e’ in business

Learning objective 2 E-business is beneficial for both businesses and consumers, and the growth of online transactions in the last decade is testament to this fact. Businesses have embraced e-business because the benefits of doing so outweigh the costs. E-business is relatively simple, cost-effective and efficient for a business.

Increased opportunities for revenue

Electronic business offers an extra sales channel in addition to sales made over the counter, by telephone, mail or through sales personnel. The potential to reach more customers in a global market is the motivation for many businesses having at least a web presence (a website), even if they do not trade electronically. The potential for increased sales at a national and international level must be followed up with a good product and good service, to be converted to additional revenue.

A level playing field

Whether it is a global corporation or a small business run from home, each business has the same opportunity to reach the same market using electronic channels. Regardless of the business’s size, it has just one website; that website is its gateway to a global market. The Internet therefore allows all businesses in the same market, whatever their size, to operate on the same level playing field as they all have access to the same customers. An e-customer does not care whether the business is located in Boggabilla, Bogotá or Brisbane, as long as the services or goods are delivered in a timely fashion.

Other benefits for businesses and consumers

Table [8.1] provides a more detailed list of the benefits of e-business for both businesses and consumers.

[8.1]

Advantages	For businesses	For consumers
Convenience	<ul style="list-style-type: none"> Reduced or no face-to-face contact with the customer. The business schedules time for customer response rather than being at the demand of the customer, as in telephone or face-to-face contact Businesses can attend to their customers at any time, not just during normal trading hours 	<ul style="list-style-type: none"> Consumers can shop 24 hours a day, seven days a week Consumers can compare prices and look before they buy without pressure from sales personnel
Savings	<ul style="list-style-type: none"> No shop rent if business is only conducted on the Internet May need less staff Having a website is a constant form of advertising to the public as it means information is available about services, products, business, promotions, contact details etc. Business does not need to transport goods from warehouse to shop, but can send them directly to the customer from the warehouse 	<ul style="list-style-type: none"> Less time and energy are needed. Shoppers are able to peruse more prices and compare features from the comfort of their homes without having to commit to a purchase Theoretically, prices should be lower due to lower costs and greater competition
Speed	<ul style="list-style-type: none"> Orders can be sent immediately, and transactions can be settled online. Funds are electronically transferred from the customer's account to the business after authorisation. The transaction data is collected in electronic form and entered into an accounting package. 	<ul style="list-style-type: none"> Orders can be placed online. Payment can be made online.

Review & practice

1

- a What** is an e-business?
- b Is** there a difference between e-business and e-commerce? Does it matter?
- c What** does 'a level playing field' mean, and how does this apply to e-business?
- d What** are the principal advantages of operating an e-business from the perspective of the business?
- e What** are the principal advantages of operating an e-business from the perspective of the consumer?
- f Why** do consumers choose to shop online?

Levels of 'e' in e-business

A business needs to decide on the level of electronic business in which it wishes to engage. Like any business decision this is a cost versus benefit decision. Many small businesses have been created because of the Internet, and existing businesses have had to redevelop their own model of doing business to incorporate e-business technology.

Each level of e-business involves more expense; however, e-business is about the optimisation of business processes, so the greater the integration of available technologies, the greater are the likely cost savings. Electronic technologies can be integrated into both 'front-end' and 'back-end' business processes to ensure efficiency and improve the service provided to customers. Table [8.2] illustrates these levels.

[8.2]

See page 447 for a discussion of portals.

Email only	A business can have an email address that reflects its business name.
E-presence	The business may have an email address mentioned on a 'portal'. Alternatively, it may have a website designed and hosted by an ISP (or it may host the website on a server within the business). The aim of an e-presence is to promote the products or services of the business. Actual business is then conducted via email, telephone or fax, or through a shopfront.
E-commerce	The business has a website that integrates online trading, often using 'shopping cart' technology and a secure site to facilitate online payments.
Full integration of electronic technologies	This is the most expensive option, but it also means the business takes full advantage of the benefits of e-commerce. It may be built up slowly over time, but eventually the business has a fully integrated system that uses technology for purchasing (procurement), warehousing, production, delivery, administration, accounting and inventory systems, and all those systems integrate with each other.



'Front-end' business systems are those that interact directly with customers and include email, websites and any marketing designed to promote the website. The 'back-end' systems are those not so visible to the consumer and these are the purchasing (procurement), warehousing, production, delivery, administration, accounting and inventory systems. The use of electronic technologies in front and back-end business systems will optimise the business processes with the aim of providing good service and improving the business's responsiveness to its customers.

The following examples [1–4] illustrate businesses integrating technology at various levels:

- e-presence
- e-presence and email to deliver a service
- moving from e-presence to e-commerce
- e-commerce.

EXAMPLE 1

E-presence: Brown James <www.brownjames.com>

Brown James has an e-presence. This business is an architectural firm that specialises in the design of interiors for corporate, retail and museum clients. The firm also specialises in project management. This business has a website but does not trade online. Informing its market about the services it offers, the design team that work for the business, showcasing its design projects and providing contact details are the major objectives of its website. As a service business it does not need to trade online but uses email and telephone communication extensively when dealing with its customers as well as meeting face to face. Read about the diverse types of designs this business has carried out and see the cross links to other businesses on this site. These are links to businesses for whom Brown James has completed design projects.

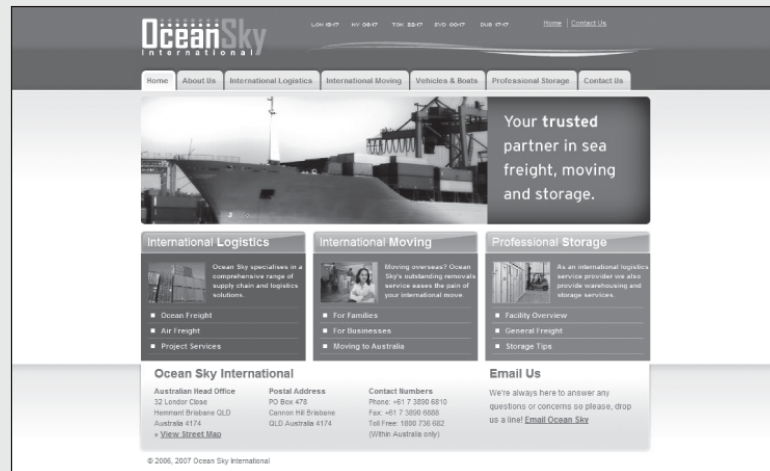


EXAMPLE 2

**E-presence and email to deliver a service:
Ocean Sky International <www.oceansky.com.au>**

Richard and Christine Chehade own Ocean Sky International in Brisbane [8.3]. Their small business employs approximately eight staff. Richard says that over 60% of enquiries now come from their website, and it is not unusual for them to move people from one country to another without them ever seeing the customer or their freight. The initial customer contact will often occur by email, and Ocean Sky will send a quote by email to the customer, who may be located in New York. The customer will source quotes from other international movers, who may be located in the United States or other countries, before deciding to accept the quote from Ocean Sky in Australia. Richard and Christine then organise to relocate the customer's freight via international ships or airline companies, taking care of all international customs requirements from their Brisbane office. Payment is made electronically by the customer when they receive their freight, which may be one month later in London.

[8.3]



EXAMPLE 3**Moving from e-presence to e-commerce: NORAC <www.norac.com.au>**

NORAC is an information and technology management firm established by its partners Paul O'Connor and Dirk Cutlack. Paul and Dirk initially established an e-presence with a website when the business was at the initial setup stage. Its website shown in [8.4] and [8.5] was at the e-presence phase of its e-business integration. This means it had a website that directed customers to its telephone or email contacts. In setting this up, NORAC also established its own domain name at the .com.au domain so that its website and email contacts all reflect its business name.

[8.4]

'GITC No. Q-1783' indicates that this business is registered to provide IT services for government departments in Queensland.

[8.5]

This small business has continued to develop and now offers online trading operations [8.6], although the partners consider that the business is still basically a 'bricks and mortar' business due to the fact that this business still ultimately provides a service that involves setting up and maintaining computer networks for businesses and individuals in their offices or homes. The NORAC website is considered to be a service to clients, rather than an advertising tool for new clients. Paul and Dirk consider their business to be an example of a traditional face-to-face business adding some electronic interfaces, rather than predominately operating as e-commerce. They do, however, have a 'back-end' system in operation, as their website catalogue is a direct 'data feed' from up to about 40 suppliers.

The partners have chosen at this stage not to integrate their internal accounting system with the e-commerce engine. NORAC emails customers invoices in PDF format, provides customer service via email and uses Internet banking.

[8.6]



EXAMPLE 4

E-commerce: DigitalYes <www.digitalyes.com.au>

DigitalYes, illustrated in [8.7], operates only as an online store. It does not have a shopfront. Its website *is* the business. Note that this business also trades on eBay.

Follow the online process on pages 429–31 to see how this e-business trades online by integrating e-business technology successfully at its front end.



[8.7]

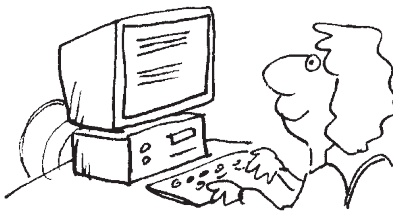


Establishing an e-presence or an e-business

Learning objective 3 No matter which level a business wishes to enter into, its first decision is to choose an Internet service provider (ISP).

Internet service provider

An ISP is your link to the Internet. Hosting your own website means having a 'server' available and allowing access to this server 24/7. This also means ensuring security is at a level where your business information is safe from illegal access. Many smaller businesses elect to have their website stored on the server of an ISP that acts as a 'host'. Selecting an ISP is generally the first step in setting up an online business, and a subscription is paid to this provider to connect you to the Internet. Many ISPs provide 'webhosting' as one of their services. They may also be a registered supplier of 'domain' names.



Try designing your own website. See www.netregistry.com.au/webhosting/instance-website/.

Registering a domain name

A domain name is basically the central element of the business's unique identity on the web and is technically a web address. Internet addresses are really numbers (Internet Protocol (IP)) such as 192.144.235.23. Computers operate much more quickly using numbers, but as people would find them difficult to remember, words and phrases are used instead. The DNS, or Domain Name System, translates the alphabetic name into the IP numbers used by the Internet to make the connection to the desired site.

The importance of a domain name for a business cannot be underestimated. The domain name is like signage on a building, because it identifies the business and should reflect the business name as closely as possible. Some businesses even register their formal business name with some form of 'dot com' included, so that their business name IS their web address.

The Australian Domain Name Administrator, or auDA (www.auda.org.au), is the organisation charged with the responsibility for implementing domain name policy for the .au domain. This is a not-for-profit company that has the responsibility of maintaining the integrity and Australian identity of the Top Level Domain (TLD) .au. There are strict rules related to the purchase of Second Level Domain (2LD) names – that is, .com.au, .net.au and .org.au. These rules ensure that the .au domain is used only by formally registered businesses or organisations, and that owners can be traced easily. These restrictions give customers some degree of confidence when transacting with a .com.au business. .com is an internationally used domain which has minimal restrictions. In Australia, auDA has ensured that domain names cannot be sold like property but can be transferred from one registrant to another. A domain name holder has exclusive rights to that domain name for the period covered by the registration fee.

Cost of developing a website

Although the development of a website is a significant cost in the first instance, subsequent budgets will not require outlay for this expense. A budget template for building a website is shown in [8.8], found at www.e-businessguide.gov.au/planning/issues/budget. This Excel spreadsheet helps a business owner to anticipate the costs that are involved, especially if the work is to be outsourced to a specialist web developer rather than completed 'in-house'. What might surprise some is that the cost of maintaining, evaluating, testing and enhancing a site in future budget periods will generally exceed the initial development cost! A further template for calculating annual website maintenance costs can also be downloaded at www.e-businessguide.gov.au/managing/maintaining.

[8.8]

	A	B	C	D
1	e-businessguide an Australian guide to doing business online	Budget Template for Building a Website		
3	This budget template can be used to work out the costs of developing a website with your web developer. Enter into cell B4 the daily web developer rate eg \$550, enter the estimated number of days to undertake each activity and then enter a formula in column C to calculate the fee.			
4	average daily rate for outsourced web developer \$			
5	Tasks	Estimated Days	Fee	
6				
7	Stage 1: Technical specifications			
8	Scoping the project (ie finalising scope, functions, deliverables and costs)			
9				
10	Stage 2: The development			
11	Project management (approx 5 meetings, reporting, liaising etc)			
12	Graphic design (eg look and feel, navigation buttons)			
13	General programming (creating navigation and meta-tags, creating maintenance templates etc)			
14				
15	Specific programming of functional elements eg			
16	> Search engine software and interface			
17	> Online forms (eg membership application forms)			
18	> Promotional features (eg competition, games and surveys)			
19				
20				
21	Stage 3: Delivery and deployment			
22	Training			
23	Documentation			
24				
25	Approximately 5% contingency allowance			
26				
27	Totals			
28				
29	Web server and hosting costs			
30	Registration of domain name			
31	Web hosting with an ISP inc. email addresses/discussion group etc			
32				
33				
34				
35	Additional possible costs			
36	Creation of a database			
37	Database annual licence fee			
38	Populating database with content			
39	Technical testing			
40	Register with search engines			
41	Database and infrastructure advice from consultant			
42	Legal (eg contract with web developer, copyright advice)			
43	Content writer @ \$50/hr			
44	Usability testing (target audience test-drive the site for feedback)			
45	E-commerce solution (annual license and connection to a bank)			
46	Software for uploading new content (eg DreamWeaver)			
47	Site traffic and usage software or service (annual license)			
48	Search engine registration services			
49	Marketing and promotion (advertising new site in traditional media)			
50				
51			Total \$	
52	Downloaded from www.e-businessguide.gov.au page 1 of 1			

Review & practice 2

- a What** are some of the set-up costs associated with entering into e-business?
- b What** is a domain name?
- c What** is the difference between a domain and a domain name?
- d What** does it mean to have an address in a 2LD?
- e What** is an ISP?
- f What** are some of the costs involved in building a website (see [8.8])?
- g While** there are set-up costs for an e-business, there are also ongoing costs. What would some of the additional ongoing expenses be for an e-business (see [8.8])?
- h How** can you distinguish between a business with an e-presence and a business that offers e-commerce?

► Exercises 8.8 to 8.12, pages 454–7



E-commerce – the process

Learning objective 4

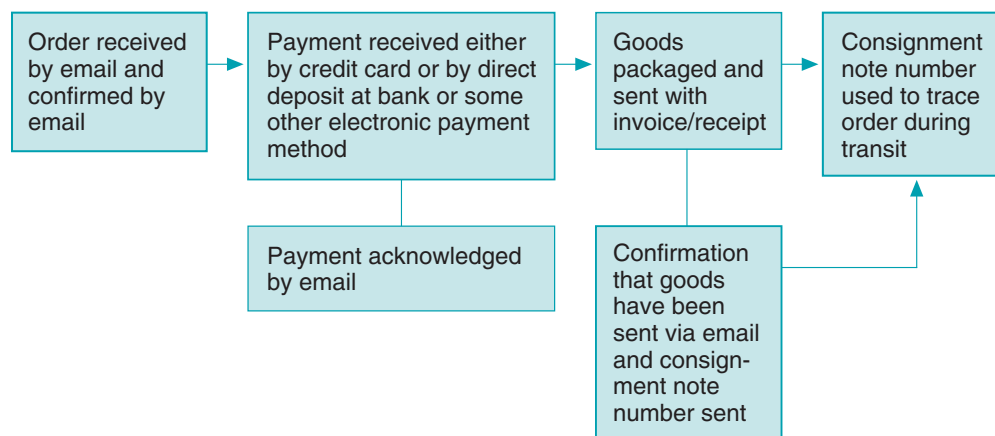
Online trading is similar in many respects to normal trading. From an accounting perspective there is only one difference and that is that cash is received for the goods before the goods are sent. Other than that, the only difference between the normal document flow for a 'bricks and mortar' type business and an online business is in the level of customer service able to be given through quick email communication. With an online transaction, despite lack of face-to-face contact, the customer can be communicated with at every stage of the transaction and has much more interaction with the process of the purchase.

[8.9]

- The *normal document flow* for a 'bricks and mortar' business



- The *electronic document flow* of an e-business transaction



An online sale

Trace the process of an online sale through the following steps.

Step 1: Monday pm

User logs on to the DigitalYes website <www.digitalyes.com.au> and registers to order from the site. By requiring a customer to register to use the site, the business collects information from the customer voluntarily. It can then use this information to market to the consumer in the future. An email confirming registration is sent to the customer. This validates that the customer is the owner of the email address.

Step 2: Monday pm

Registered user (customer) submits an order using the site's 'shopping cart', and this order is confirmed in an email to the customer with details about payment. This business gives various options for payment, including:

- payment by credit card
- payment through PayPal (a third party)
- direct deposit to the firm's bank account
- payment by cheque in the mail.

The consumer chooses the preferred payment method. Once the payment has been verified, the goods will be sent.

Step 3: Tuesday am

When the payment has been received, the business upgrades the order status to 'paid' and emails notice of this to the customer. A courier service is engaged to pick up and deliver the goods.

Step 4: Tuesday pm

An email is sent notifying the customer that the goods are on their way. It is also an opportunity to thank the customer for their business and to let them know about how the goods are being dispatched. The email includes a link for tracking the goods through the courier service being used, and a tax invoice as an attachment. In addition to a purchase order number allocated by the business and a tax invoice number, the parcel is given a consignment number by the courier which is bar coded and scanned at each step in the process. This allows the customer to trace his or her goods.

Step 5: Wednesday am

The customer is able to click on the link in the previous email, which hyperlinks to the computerised tracking of the courier firm. The tracing of the package at each step of the process alerts the customer to the fact that the goods have arrived at the depot overnight from Melbourne and are likely to be delivered during the day, as illustrated in [8.10]. The reference number advised in a previous email is the consignment number used to trace the parcel. The goods are delivered to the customer at 9.00 am on Wednesday, less than 48 hours after the customer has registered to use the DigitalYes website.

[8.10]

The screenshot shows the Australian air Express website interface. At the top, there's a navigation bar with the company logo and date (18 February 2007). Below this, a 'TRACK & TRACE' section is highlighted. The main content area displays search results for a specific consignment.

Search Results

CONSIGNMENT: 62157166
Service Level: Overnight

Date	Time	Location	Status
10 Jan 2007	09:00	Banyo	Delivered and signed by P GRAY
10 Jan 2007	07:34	Banyo	Onboard with courier driver
10 Jan 2007	07:13	Banyo	Received at AaE Depot
09 Jan 2007	19:04	Melbourne	Picked Up from Sender

Page 1 of 1 (1-4 of 4 events)

Navigation buttons: First, Previous, Next, Last, Search Again, Proof of Delivery.

Footer: Terms of Use | Sitemap | © Copyright Australian air Express. A Partnership of QANTAS and POST.

This business clearly shows the use of e-business strategies to provide excellent customer service. This is achieved by keeping the customer informed at each stage of the transaction via email.

Drop shipping

The process described on pages 429–30 as used by DigitalYes is an example of the ‘front-end system’ that a B2C uses when interacting directly with the customer. The ‘back-end’ of this business, which the customer does not see, is an example of B2B and involves DigitalYes purchasing from the wholesaler, rather than holding inventory itself. Recall that DigitalYes does not have a shopfront and is purely an e-business. The process used by this business is to purchase goods from a wholesaler only when goods are ordered by a customer. The customer is unaware that the goods have come directly from the wholesaler. The retailer (DigitalYes) is paid for the goods when they are purchased by the consumer online, so cash flow is assured before the sale is completed. The retailer can then use credit arrangements to delay payment to the wholesaler until the next month. Profit is earned by the difference in the profit margins between the wholesale purchase and the sale by the retailer to the customer. Lower costs are a benefit for the retailer. The retailer does not hold inventory at any time and so saves on costs involved in storing or warehousing inventory, transport costs, deterioration and security of inventories. Another significant cost that is avoided is the loss of inventory through theft and pilfering.

Drop shipping is a supply chain management technique. It is also discussed in Chapter 7, page 397, as ‘just-in-time purchasing’. The advent of e-business has given this technique for inventory management an ‘online’ perspective. The cost savings for the retailer (or ‘e-tailer’) are significant. EBay-based businesses often use this strategy. The technique has also been associated with some Internet-based ‘work-from-home’ scams which involve multiple resellers, leaving very little profit margin for the final e-tailer.

Delivery via the Internet

The greatest cost savings for businesses are made when an e-business can also make the delivery of the goods online. This, of course, is most relevant to the IT industry and particularly to the sales of software. Software can be downloaded for ‘trial’ for a number of days, and then it becomes inoperable unless a ‘key’ is purchased that allows it to be operated in full.

There are five steps to the purchase of this software from TechSmith. This site uses ‘shopping cart’ technology and also delivers online.

Step 1 [8.11] is to confirm your selection of software.

Step 2 is to add your purchases to your ‘cart’.

Step 3 is the checkout, where the payment method is selected.

[8.11]

TechSmith

1 → 2 → 3 → 4 → 5
CONFIRM SELECTION ADD TO CART CHECK OUT SUBMIT ORDER RECEIPT

Purchase SnagIt 8.2 Single User

Home / Online Store /

Snagit 8.2 Single User

Using Snagit, you can select and capture anything on your screen and share it with others to visually clarify difficult concepts, create clearer documentation, and give your presentations a professional, dynamic look.

Snagit 8.2 Single User License: **\$39.95 each**

Language	Delivery	Operating System
<input checked="" type="radio"/> English v8.2	<input checked="" type="radio"/> Electronic Only	Windows
<input type="radio"/> German v8.2	<input type="radio"/> Boxed & Electronic	
<input type="radio"/> French v8.2		

Quantity: 1 \$39.95 [Update Price](#)

Shipping total for this item: \$0.00

Promotional Code: (Optional) [Add to Cart](#)

Your order includes:

- One software key e-mailed to unlock free trial for immediate use.

Purchase

- Online Store
- Purchase Snagit
 - Purchase Camtasia
 - Purchase Bundle
 - Purchase UserVue
 - Purchase Morae
- How to Buy
 - Volume Discounts
 - Education Pricing
 - Government and Non-Profit Pricing
- Contact Sales
- Order Through Reseller
- Online Store FAQ
 - Shipping Information
 - Order Security
 - Maintenance
 - Return Policy

Step 4 [8.12] shows the final submission of your order where payment is made via a credit card.

[8.12]

TechSmith

1 → 2 → 3 → 4 → 5
CONFIRM SELECTION ADD TO CART CHECK OUT SUBMIT ORDER RECEIPT

Submit Order

Please enter the following payment information.

The name provided in the Billing Information must match the name on the credit card. Fields with the "*" are required.

* Card Type:

Name on Card: Mrs Molly Saunders

* Card Number: 4

* Card Security Code:

[What is a Card Security Code?](#)

* Expiration Month: 11

* Expiration Year: 2008

[Place Order](#)

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Step 5 [8.13] is the screen you see when your purchase and payment is receipted.

[8.13]

TechSmith

1 → 2 → 3 → 4 → 5
CONFIRM SELECTION ADD TO CART CHECK OUT SUBMIT ORDER RECEIPT

Products Downloads Support Community Company Purchase

Thank you for your order, you are done!

An e-mail receipt with a key to unlock your software will be sent to: mollys@hotmail.com shortly. (Usually within 15 minutes).
Please check your spam folder for our e-mail receipt. To keep our receipt from being blocked, add custservice@techsmith.com to your e-mail address book.

[Print](#) [Sign up for our newsletter](#) [TechSmith Home](#) [Place another order](#)

Order Placed: 12/26/2007 4:00:48 PM
Confirmation Number: TSW547270
Product Information

Product Name	Software Language	Operating System	Quantity	Price
Snagit 8.2 Single User	English	Windows	1	\$39.95
Shipping & Handling				\$0.00
Total				\$39.95

Billing Information
Mrs Molly Saunders
6 Sweetapple Street
AVOCA TAS 7213
AUSTRALIA
mollys@hotmail.com

Payment Information
Card Type: Visa
Number (last 4 digits): 1112
Name on Card: M Saunders
Expiration Date: 11/2008

Please allow up to 24 hours for your receipt to be delivered. If further assistance is required, please contact TechSmith Customer Service at 800.517.3001 x636 (USA) or +1.517.381.2300 x636 or at support@techsmith.com. Our Customer Service hours are 8am-6pm Eastern, Monday through Friday.

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After step 5 is completed, the seller sends an email receipt which includes a 'key' that is then used in the software so that it is fully operational. This 'key' is also submitted to the website to register the purchase of the software.

Accounting for online transactions

Learning objective 5 From an accounting perspective, e-business transactions are really no different from over-the-counter transactions. E-business simply offers an extra opportunity for the generation of sales revenue. The source of the transaction does not alter the way it is treated in the accounting records. Sales and payments made via the Internet are processed in the same manner as sales and payments made via traditional methods.

Some businesses use a 'shopping cart' interface on their website to allow customers to choose the product or service they desire. This manifests itself as an email to the business in which the order for goods or a service is made. The 'e-sale' is then acted upon manually in the same way it would be treated if the customer had come to a shopfront. That is, an employee collects and packages the goods and they are sent to the customer via mail or courier. Alternatively, the customer is contacted and the service is delivered – for example, a taxi can be ordered online. The taxi service arrives at the customer's door. Larger retail businesses might have their online sales system automated with their inventory and accounting systems. When purchasing airline tickets online, you are very aware that you are connecting with a more sophisticated system as you can choose your own seat allocation and

print a boarding pass. Payment from a customer may go through a secure 'gateway' (another site that is secure and processes online payments), or the business may have its own secure site that processes payments with a high level of security, or the business may use the services of a bank that offers secure online transactions. Alternatively, some businesses still give online customers the choice of making a payment via cheque, direct deposit, or by using a third party such as PayPal. Once the payment has been receipted (or ratified), the goods can be delivered. If the goods are electronic, they can be 'delivered' by email.

Transaction data is collected in electronic form and entered into an accounting package in a similar fashion to the recording of an over-the-counter sale. This information is then transferred into the established accounting system (most probably a computerised system). A fundamental difference for online transactions is that the cash is paid before the goods are sent.

Issues with trading online

Learning objective 6 The most common method of payment for goods purchased on the Internet is a credit card. However, before a customer will exchange this sort of information they must have confidence in the integrity of the business with whom they are transacting online and this means feeling secure about releasing financial data electronically.

There are three main issues with respect to payment for online transactions:

- authenticity and information security
- non-repudiation
- privacy and confidentiality.

Authenticity and information security

A 'digital certificate' and 'keys' are both central to authenticity and security in electronic transactions. These are words that are used in cryptography, because encryption is the method used for securing online transactions. A digital certificate is an electronic file that contains information that identifies the user and is used to verify that a key (generally, a password) belongs to an individual. It authenticates the user to the system, and through encryption the data is sent online securely. When an organisation or a business uses public key infrastructure (PKI) or a form of it that is often used, Secure Sockets Layer (SSL), a third party, a Certificate Authority, will attest to the identity of the holder of the certificate.

When a site is issued with a digital certificate by a recognised Certificate Authority (such as VeriSign or thawte), customers can feel secure that encryption is being used to protect their private financial information (such as credit card details) from unauthorised use over the Internet. The Certificate Authority builds up its own reputation of trust, and its signature logo (generally referred to as a 'site seal') is used on the sites that have registered with it. The Certificate Authority has some stringent criteria that it applies to be able to verify the site, and to allow the site to include its logo, which is recognised and trusted by consumers. The certificate contains a key that is then used to initiate a Secure Sockets Layer (SSL) session, where data is encrypted before it is transferred.

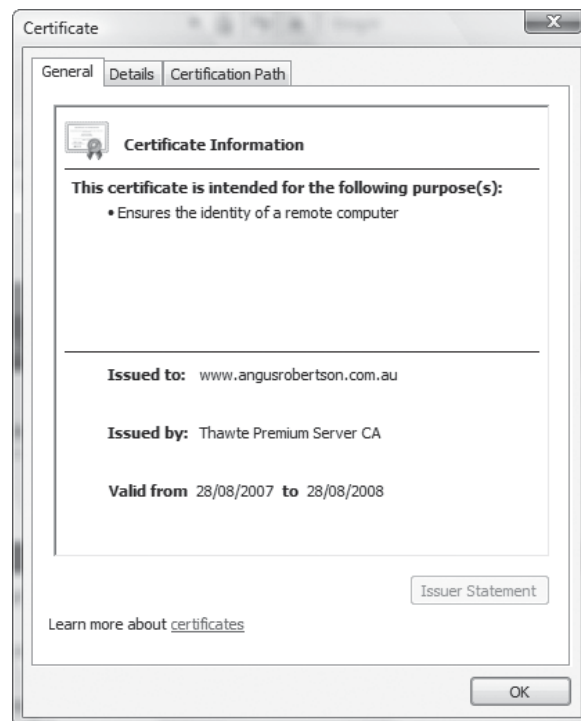
Customers expect to see the logo of a Certificate Authority on an e-commerce site to give them reassurance that they are dealing with a legitimate business in a secure electronic environment.

Another method to determine whether a site is secured with a digital certificate is to check if there is a golden padlock in the status bar. Double clicking on this padlock will open the certificate, which assures the customer that the site has been verified as legitimate (see [8.14] and [8.15]).

[8.14]

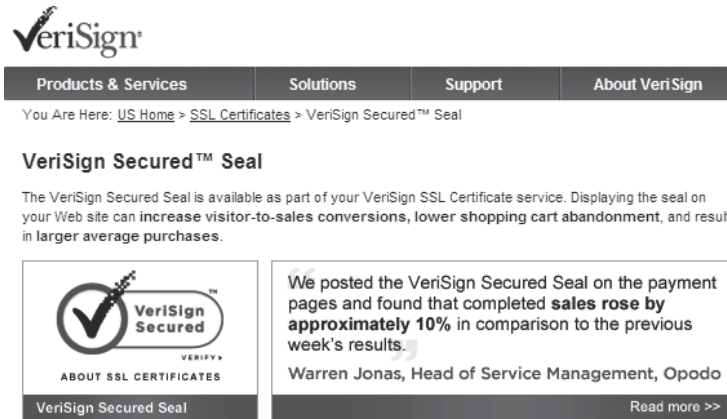


[8.15]



VeriSign is another Certificate Authority and provider of secure (encrypted) online transactions. The VeriSign secured seal logo ([8.16]) gives customers reassurance that private information exchanged in an online transaction is safe from interception and theft.

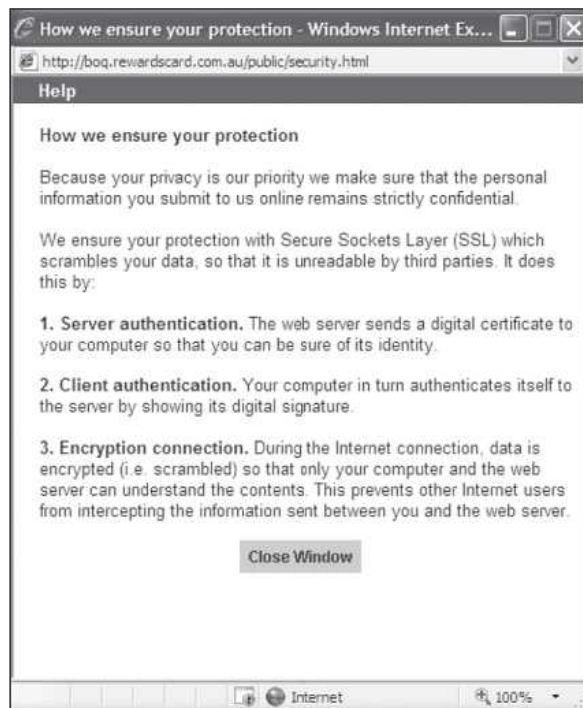
[8.16] VeriSign logo



www.verisign.com

For web-based businesses, the use of SSL technology enables data being transferred between a browser and a website to be protected through encryption. Data that is exchanged is encrypted before it is sent, and passwords are necessary to gain access. SSL technology is software that enables 128-bit or 256-bit encryption to take place. It is a popular choice for e-businesses because the popular web browsers support it and customers can use it with ease. SSL is virtually transparent to the user, but the browser will display a small padlock in the bottom right-hand corner. Secure sites can be identified in the address bar as beginning with `https://` rather than `http://`. Figure [8.17] illustrates how one site explains to its customers how it ensures protection.

[8.17] Example of an e-business's reassurance about security



Source: courtesy of Bank of Queensland and Pinpoint Pty. Ltd.

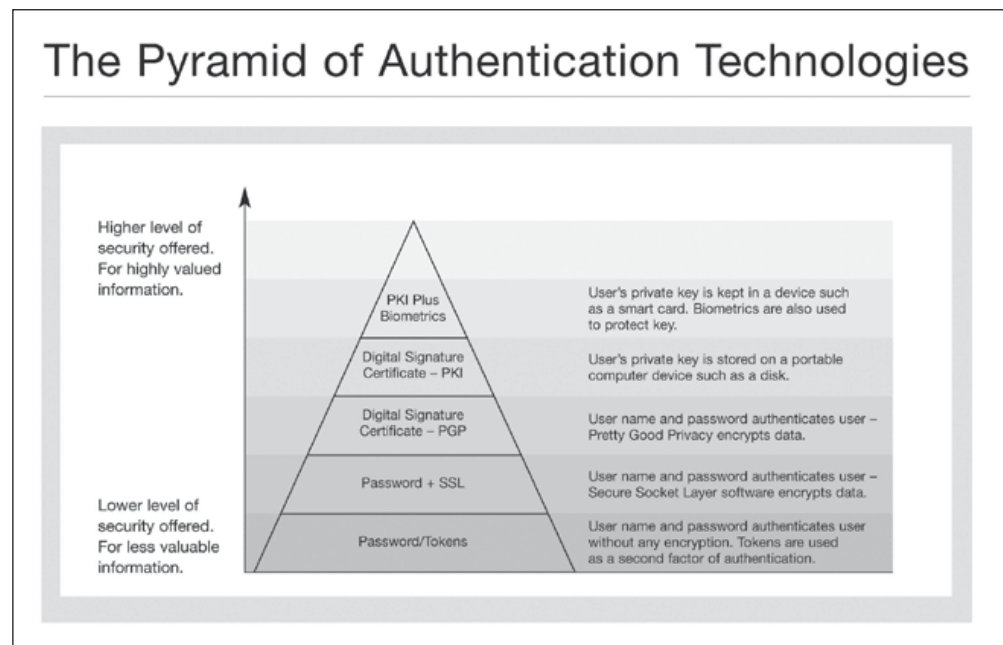
A driver's licence is often used for identification purposes, as it has a photograph and has been issued by a government department. Security must be assured to encourage people to renew their licence electronically. The assurance given to customers by Queensland Transport is illustrated in [8.18].

[8.18] Queensland Transport's assurance of online security



The higher the value of the information being exchanged electronically, the higher the level of security needed. The Pyramid of Authentication Technologies is shown in [8.19].

[8.19] The Pyramid of Authentication Technologies



The level of security needed for online banking is extremely high. The same is true for engaging in transactions with government bodies such as the Australian Taxation Office. There has been a considerable push from both the banking industry and government organisations to utilise electronic processes, due to the considerable savings in costs and the growing demand for electronic services resulting from the shift from dial-up to broadband Internet services.

The minimum level of security expected of banks includes the following:

- careful publication of their authorised websites in their publications
- verification by digital certificate
- on-screen evidence of security protection – for example, padlock icon
- protection of PINs and passwords
- on-screen and mouse-operated keypads for sensitive information
- virus protection
- use of 128 (or higher) -bit encryption
- sophisticated firewalls
- stated limits to customer liability for unauthorised use of access codes.

Source: <www.business.qld.gov.au>.

In many cases, banks actually exceed these levels, with additional passwords and texting to a mobile to confirm a transaction. A response to the SMS is required before money is transferred. This is called two-factor authentication and means that different methods are used to ensure authenticity. The lower transacting costs of electronic banking make the investment into secure transactions online a worthwhile quest.

Non-repudiation

The main effect of the *Electronic Transactions Act 1999* was to legalise electronic transactions. This means that any order or payment made via the Internet is legally binding and can be enforced. Both businesses (and customers) need to be confident that the other party will not later deny (repudiate) that the transaction took place, especially after funds have been transferred electronically.

A **clickwrap agreement** (also known as a ‘clickthrough’ agreement or ‘clickwrap licence’) is used by e-businesses when ‘contracting’ with customers. This type of ‘agreement’ is used when an action on a website will not proceed until the customer ‘clicks’ a link to say that they have read the terms and conditions and agree to be bound by this agreement. This arrangement was originally used for purchases of software, but is now being used more widely to ensure consumers ‘read the fine print’ before agreeing to online purchases, or simply to convey conditions of use of a site. A clickwrap agreement is shown in [8.20].

[8.20]



Privacy and confidentiality

Security and privacy issues are addressed openly in business websites, and commitment to the interests of clients is up-front. Quite often, a business states explicitly what information it will or will not exchange with other parties. Of course, sometimes as part of the transaction, the business may need to exchange personal information about a customer to a third party – for example, a courier delivering the ordered goods needs to know to whom the goods are to be delivered and at what address. Businesses are bound by the *Privacy Amendment (Private Sector) Act 2000*, which ensures that customers are legally entitled to have their private information kept secure. Check any commercial website in the .com.au domain and look for the privacy statement of the business.

Review & practice 3

- a Explain** the difference between the 'normal' document flow and the flow of an 'e-business' transaction.
- b How** does the accounting for online transactions differ from the accounting for an 'over-the-counter' transaction?
- c What** is an online store?
- d What** are the three main issues with respect to online transactions?
- e What** is a digital certificate?
- f What** is a key?
- g What** is a Certificate Authority?
- h What** does 'Secure Sockets Layer' mean?
- i What** is the main concern with non-repudiation?
- j What** is a 'clickwrap agreement'?
- k Which** piece of recent legislation protects the data that is collected by e-businesses when trading on the net?
- l Write** an explanation of [8.19], the Pyramid of Authentication Technologies.

Trust and online transactions

Learning objective 7

The greatest issue facing the growth of e-business is trust. The complexities of the algorithms that are involved with the cryptography in PKI are not of interest to the majority who wish to make use of the convenience of trading, banking or submitting tax requirements online. What is paramount for the public is trust – trust that the site is legitimate, that their details are kept private and safe, that the business or organisation has a secure site or uses a secure gateway for online trading, and, most importantly, that what is purchased is delivered in good time. Major developments have been made in this respect in the last decade, as evidenced by the increasing number of Australians who, feeling secure, now access the Internet and engage in online transactions. However, threats to this trust appear to be increasingly sophisticated, requiring constant vigilance by both providers and users of electronic services.

While trust is an issue that is less tangible and more one of perception, security that counters cybercrime is a technical issue that has a physical dimension. Both are intertwined and inseparable, to a degree. For a consumer to engage in an online transaction, they must have trust in the organisation they are dealing with, and this trust is based on their belief that the level of security of their personal and financial information is very high.

The greatest threat to the trust that has been built up and to future growth of online trading is **cybercrime**. Cybercriminals are not just one type of criminal with one purpose in mind. The crimes committed are quite diverse, but for our purposes we will consider three types of intent:

- malicious intent
- data and identity theft
- fraudulent intent.

The ‘war’ against cybercrime appears to be continuing unabated, despite the passage of legislation (the *Cybercrime Act 2001*) that covers criminal activity on the Internet, such as hacking and spreading viruses. New defences are found, only for a new and more sophisticated scam to appear. Managing the risk of these threats is the concern of any business operating electronically. The ‘always-on’ nature of broadband services makes computers more susceptible to abuse. Spam and ‘denial of service’ attacks can be launched by ‘zombie’ computers in a manner that is almost impossible to trace back to the actual perpetrator. No matter what the intent, ‘cyberthreats’ are perpetrated by e-criminals. A number of different types of threats, and how they work, are detailed in **[8.21]**.

[8.21]

Threat	What is it?	How it works
Phishing	Phishing is a fraudulent behaviour that attempts to trick people into giving out personal information online. The illicitly obtained information is used to defraud victims for financial gain.	Claiming to be from a legitimate institution, phishers send phony emails with web links, requesting personal information or directing the recipient to a fake website.
Pharming	Pharming is a rare form of phishing in which users are directed to a fake website where personal information is then requested.	Criminals successfully reroute victims who are typing in legitimate web addresses to fraudulent sites designed to steal personal information.

Crimeware	<p>Crimeware covers a wide range of malicious software, including programs such as spyware, keystroke loggers, screen scrapers and trojan horses. These programs are intentionally used to enable cybercrimes such as online identity theft.</p> <p>Viruses, worms and other older forms of malicious software are a nuisance. Spyware is the main problem today and is funded by criminals.</p>	<p>Information entered into your computer or displayed on your screen is captured and sent over the Internet to a cybercriminal in another location.</p> <p>Malicious code is sent to an unsuspecting recipient, generally via email. Once opened, the code wreaks havoc and can disable a computer system or network.</p>
Bots	<p>A bot is a type of malware that allows an attacker to take control over an affected computer. Also known as web robots, bots are usually part of a network of infected machines, known as a botnet, which is typically made up of victim machines (zombies) that stretch across the globe.</p> <p>Some botnets might have a few hundred or a couple of thousand computers, but others have tens and even hundreds of thousands of zombies at their disposal. Many of these computers are infected without their owners' knowledge.</p>	<p>Bots sneak on to a person's computer in many ways. Bots often spread themselves across the Internet by searching for vulnerable, unprotected computers to infect. When they find an exposed computer, they quickly infect the machine and then report back to their master. Their goal is then to stay hidden until they are instructed to carry out a task.</p> <p>After a computer is taken over by a bot, it can be used to carry out a variety of automated tasks, such as sending spam, viruses and spyware.</p> <p>They steal personal and private information such as credit card numbers, bank credentials and other sensitive personal information, and communicate it back to the malicious user.</p> <p>Launching denial of service (DoS) attacks against a specified target, cybercriminals extort money from website owners in exchange for regaining control of the compromised sites.</p> <p>Clickfraud – fraudsters use bots to boost web advertising billings by automatically clicking on Internet ads.</p>

Adapted from Symantec <www.symantec.com/norton/theme.jsp?themeid=botnet> (accessed 16 January 2008).

Service interruption

Many businesses do not have their own server but store their web page on the server of an ISP that 'hosts' their web page. An issue for any business that operates on the Internet is its dependence on good service from its ISP so that customers can access its website, e-catalogues and so on 24/7. Service interruptions due to technical difficulties must be kept to an absolute minimum, as service interruption means loss of business. Servicing and upgrades are generally scheduled from midnight to 6.00 am, when most people would not require access to the website.

Read the article from *The Age*, 13 December 2007, in [8.22], which questions the safety of online banking. Is this a concern for small and large businesses, as well as for individuals?

[8.22]

Is internet banking safe?

Each year online banking customers are being defrauded of more than \$25 million. Can we keep the cyber crims from scamming us?

Katie Cincotta reports.

THERE's no doubt that Australians have taken to online banking. The figures are astonishing. About 8.5 million Australians have adopted online banking – a figure that has doubled in four years, according to finance analyst Market Intelligence Strategy Centre. And it's easy to see why. Virtual banking is easy to use, efficient and available around the clock, putting fund transfers and bill paying at our fingertips.

The centre, which tracks financial activity on behalf of bank clients, says internet banking is at a record high with 31% of all banking customers shuffling money on the web in June. But just how safe is our money from fraudsters who lure people into divulging their personal details using increasingly sophisticated scams and software? And how wise are consumers to the strategies of these professional cyber crims? Not so smart, judging by the many consumers who have fallen victim to phishing scams – hoax emails that look as though they're from an organisation such as a bank – designed to trick the unsuspecting into handing over their banking account numbers, passwords and PINs.

A recent survey commissioned by eBay showed that a staggering 93% of Australian internet users don't know what phishing is, with 72% of us engaging in online behaviour that puts us at risk of an online scam. Exactly how much money is being siphoned by high-tech fraudsters remains a mystery. The banks won't divulge their figures and the Australian Banking Association, which represents them, will only venture an estimate. 'In 2004, fraud associated with internet banking was roughly \$25 million (a year), but that was just a guesstimate based on discussions with our banks,' says the association's chief executive, David Bell.

...

But phishing scams are becoming increasingly sophisticated. Many use accurate logos and trigger words such as 'security breach', 'account suspended' or 'billing error' to gain trust and illicit a response. What ultimately undoes them are their fake websites; hover over the embedded web links and you'll notice a non-banking url such as <http://www.lostwolf.com/wes/westpac/online>.

The latest internet security report from security software developer Symantec reveals an 18% rise in phishing messages in the last six months of 2006, with eight of the top 10 impostor brands in the finance sector putting online bankers at the highest risk.

...

More troubling is the rise of sinister bots or zombies – unsecured computers that are hijacked by criminals to do their dirty work for them. 'With more than 4.5 million broadband connections, there are more computers online all the time and if they're not adequately protected they're susceptible to becoming bots,' says Australian Hi Tech Crime Centre chief James McCormack. In Australia one zombie army was found to have 400,000 computers under its power while in the Netherlands another was in control of 1 billion computers putting millions of personal details into the wrong hands.

The police are catching some of these cyber crooks, including Australians working for Asian and Russian gangs as 'mules' who receive a cut of the stolen money in return for use of their bank accounts as holding houses.

Last year, the NSW police brought down one phishing ring that robbed 61 Australians of more than \$600,000, charging 14 Sydney school students, including Trinity Grammar School graduate Jonathan Carnie Mullally, who was sentenced to two years in prison. But with hackers working globally, the Federal Police has limited scope, which is why it considers prevention crucial.

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'It's not as simple as just leaving it to the bank,' Australian Hi Tech Crime Centre chief James McCormack says. 'Consumers have to be savvy about how they operate in an online environment. We don't just want to clean up afterwards with prosecution.'

Symantec's technical product manager Robert Pregnell says the latest version of its anti-virus software uses five different security technologies, including behaviour-based monitoring, to intercept scammers. But he says anti-virus protection is no longer enough to keep

us safe.

'Good practice online, like not using the same password everywhere or asking yourself, "Do I know this person and did I expect this email?" is as effective as the best technology you can buy,' he says.

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Catherine Raffaele, *Choice's* senior policy officer in IT, says banks are avoiding publicity about online banking fraud to protect consumer confidence.

'The banks have made a lot of money by going online,' she says. 'The costs are much lower than having a bricks and mortar (presence), so it's in their interest to promote that it's easy and safe and play down those risks.'

Ms Raffaele says if banks such as Citibank can be hacked into, there's not much chance for the average person, which is why business needs to insure consumers against loss.

'Our computers are very vulnerable systems and some of the most sophisticated attacks are very targeted and there's often very little you can do,' she says.

The Australian Banking Association disagrees, pointing out that banks spend hundreds of millions each year in the cat-and-mouse fight between online security and fraudsters.

'The most important thing a bank has is its relationship with its customer and the essence of that is trust. So banks are going to do their level best to make sure customers are protected,' says association boss David Bell.

Hoax email updates are being posted on bank home pages with Westpac installing an on-screen keyboard to prevent keystroke logging. Banks such as Bendigo Bank, HSBC, NAB and the Commonwealth now offer security tokens for two-factor authentication but that's often reserved for business customers. Fraud victim Ms Garrod now uses NAB's free SMS payment security, which sends a text message to her mobile phone after every transaction – a message she must respond to before her money can move. But even that sophisticated two-factor authentication, using 'out-of-band' verification such as a mobile, does not stop your computer being hijacked by a rootkit or a malicious bot. Still, internet security expert Sharman Lichtenstein, from Deakin University, believes the internet banking system is 'safe enough' and says Australia is leading the way for safeguards with Britain recently applauding our efforts at a recent security conference.

Professor Lichtenstein says that in spite of better security technology, consumers remain the weakest link.

'Despite everything that banks can do and are doing, the ultimate solution rests with the individual consumer. Security just has to become a habit, like knowing where

your keys are,' she says.

That means updating anti-virus and anti-spyware daily, checking that it's working and educating the entire family, including children, about risks and protection.

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But the \$64,000 question remains: is internet crime scaring away online bankers and shoppers? Not by the looks of the rising online marketplace. In just seven years, eBay's Australian membership has grown to 5 million users. And more customers are choosing to bank online.

'There are multibillion-dollar businesses on the internet with hundreds of millions of customers that interact with the banks, eBay or PayPal, so the reality is that business gets done and people have confidence in it,' Mr MacGibbon says. Yet the industry agrees there's still a long way to go when it comes to consumer education about banking safely online. Having worked both on the front line of e-commerce and at the back end of law enforcement, Mr MacGibbon believes consumers ultimately hold the key to defending their own wealth.

...

Clearly, online banking has some way to go before it can be declared fully secure. But let's consider the alternatives: stash your cash under the bed where it can't earn interest and could go up in flames, head to the teller or the ATM where someone could rob you blind as you handle a wad of cash or shift your funds around in cyberspace where the threats are more complicated, less obvious and global.

Because nothing in life is certain, except death, taxes and the reality that crime follows money. Not even Bill Gates has the brainpower to change that.

Playing safe

- Install and keep up to date anti-virus software (new versions include anti-spyware/adware) and a firewall. Tick the 'automatic update' box for daily updates.
- Don't use a public computer for internet banking.
- Never respond to an email or phone call that requests confidential details such as your banking passwords. Banks will never ask you to divulge personal security details such as your internet banking password or PIN.
- Do not give out your personal or credit card information over the phone or over instant messaging unless you are dealing with a trusted source.
- Consider a separate credit card account with a low credit limit for online transactions.
- Choose a secure password with both letters and numbers and change it regularly.

- Report online banking fraud and scams to your bank, the police, and groups such as SCAMWatch (run by the ACCC) or PhishTank (run by OpenDNS).
- Spread the word about online fraud to family and friends to raise awareness.
- Ask your bank for two-factor authentication security.

Source: <www.theage.com.au/news/security/is-internet-banking-safe/2007/12/12/1197135470454.html>.

Controls to protect against risks

Learning objective 8 A business needs to ensure that controls are in place to protect its physical assets, and if working online it must put in place appropriate security measures even if using the Internet only for email. A business must protect its intellectual property, which includes its website, its business data including financial data (payroll and banking), and customer and pricing data.

Backing up data

Businesses must ensure that employees both understand the importance of, and put into practice, the business's policy of backing up data. Backups must be done systematically and be stored offsite. Policies for archiving data must also be in place.

Securing your online activities

- A firewall should be the first defence for any computer system. A firewall is hardware or software capable of detecting hackers and other security breaches. A firewall blocks unauthorised access to a system. What it does not prevent, however, is a user within the system opening an email that then has malicious code ready to be released into the system.
- Subscribe to a software supplier of anti-virus and anti-spyware software to avoid attacks. They must always be 'on' to scan incoming and outgoing email. Set your software so that it regularly checks your system. These days, suppliers of this type of software offer automatic checking of their website for updates, and activation of this feature will at least maintain some level of protection against malware.
- Scan all email attachments. Emails from unknown senders should be ignored. If you cannot trust the sender – do not open the email. Attachments can be scanned with anti-virus software before opening.
- Take care when downloading from the Internet. Download only from trusted sites.
- Keep informed about security on the Internet and subscribe to security alerts from a reliable source such as an e-security update service from a government source: <www.staysmartonline.gov.au/e-security_update_service>.
- Engage an effective spam filter.
- Secure your business information with strong passwords, and ensure that employees regularly change their passwords.

- Restrict access to areas in the business system storing sensitive information through passwords, and only give access to employees on a need-to-know basis.
- Where a business uses a wireless network, there is a greater need for security. Technical help is needed to ensure that the level of security is maintained at the highest level.

Training staff

As with any sort of controls in business, they are only effective if they are embedded in the policies of the business's procedures. If staff are trained to understand these policies and effectively follow through with them, then security can be strong and effective.

Monitoring the IT system

The size of the business will often dictate the necessity to have IT specialists employed by the business to ensure that security is effective and that the business's IT system is up to date and working effectively. IT specialists can also monitor the access by staff and alert the business owner to inappropriate or unauthorised access from within the business. Employees should be made very aware that any online activity is traceable, and is recorded and monitored. This itself is often a sufficient deterrent for employees not to act outside the expectations of the business.

Review & practice 4

- What** is the basic focus of a business offering online transactions?
- Why** are there risks involved in e-business transactions?
- What** is the consequence of an e-business not handling these risks?
- What** are four main areas of security that need to be considered by users of e-business?
- How** is the issue of authenticity generally overcome?
- What** is cybercrime?
- A cybercriminal can be charged for illegal online activity under which Act of Parliament?
- List the types of threats to an online business perpetrated by cybercriminals.
- Is** online banking 100% safe?
- List the basic controls that must be in place to ensure online safety.

Online marketing

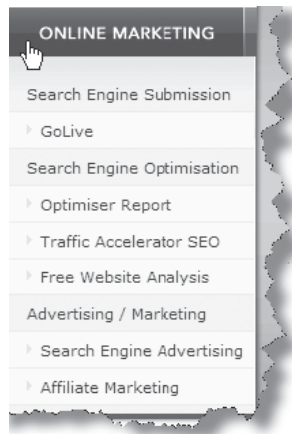
Learning objective 9

It is one thing to have a website, but the next step is probably the most important of all. The business will not increase revenue unless it can 'drive traffic' to its website. An aim of any 'e-tailer' (one who retails on the Internet) or any e-business is to create a 'sticky' site. A 'sticky' site is one that encourages the users to keep coming back to it. The aim of e-business marketing is to have customers who regularly come back to a site voluntarily.

Web traffic

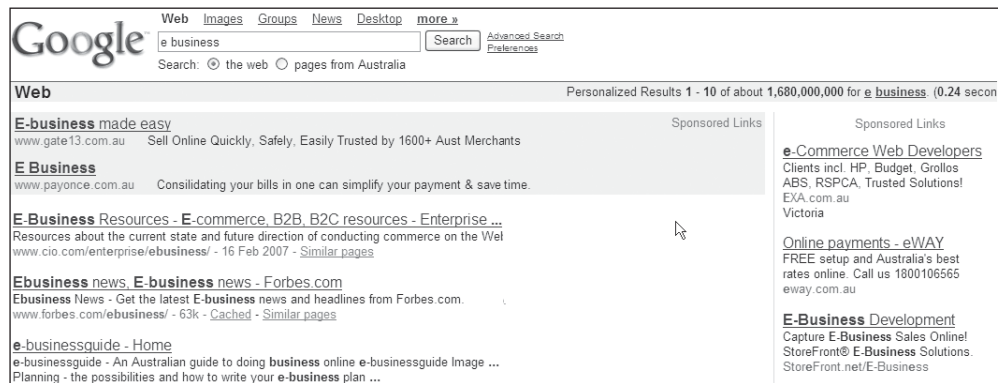
Making the best possible use of a search engine to drive traffic to a business's website is the work of specialists in the area. Web-hosting and domain name sellers generally specialise in search engine optimisation, which is about offering services so that businesses who pay for links get the best possible return on their advertising dollars. NetRegistry is a domain name registrar and web-hosting business. The online marketing services offered by this business are shown in [8.23].

[8.23] Online marketing options from <www.netregistry.com.au>



Google Adwords [8.24] are paid advertisements that appear on the first page of a Google search under the heading 'Sponsored Links'. The business only pays when a person clicks on the details. Businesses may have to pay a considerable amount to ensure that their website is listed on the first page of a particular search engine. The higher up the listing, the greater the chance of more 'hits', and the more 'hits' the higher the link will be listed.

[8.24] Example of Google Adwords



Portals

Another method is to have your business listed on a [portal](#). <www.shopbot.com.au> and <www.shopmania.com.au> in [8.25] are two examples of portals that connect with the inventory systems of other businesses and where stocks held are updated directly from the business's server. They charge when a user clicks to go to the business's site after choosing one of the products offered. These sites link to the business's site; because they link to the inventory, rather than the home page, they are operating at the 'back end'. Participation in such a portal also gives a business a better positioning with search engines.

[8.25]



Emailing and messaging customers

If a business uses email to market to customers, they must act within the provisions of the *Spam Act 2003*. This legislation prohibits the sending of bulk or individual messages by businesses and applies to commercial electronic messages sent without consent. It applies to email, short message service (SMS), multimedia message service (MMS) and instant messaging (iM). Email lists that have been generated by address harvesting software may not be used under this Act. Businesses still email their customers, but first they ask them to subscribe to the site. In effect, the customer volunteers their information, including an email address, and effectively consents to receiving commercial messages. Sometimes this is explicit and other times it is 'in the fine print'. The law requires that a commercial message must contain accurate information about the sender and a functional way for a recipient to unsubscribe and therefore not receive further messages.

Bulletins and newsletters

An effective method of marketing on the Internet is to ask customers or users of the site to subscribe to a newsletter or bulletin. This allows the opportunity to communicate regularly with a customer base and should attract customers to trade. Advertising goods, as well as giving information about products and related information of interest to the consumer, are worthwhile. Just as email is cheaper than mail, maintaining a database of email addresses is more cost-effective than maintaining an up-to-date database of customer addresses for mailing.

Data mining

Data mining is analysis of data to find information that can influence actions and decisions. This is not a new process, but it can be applied now to information collected from a web environment. This data is collected by software and is particularly useful in determining how a business's website is being used. Each click on each page is recorded, and the website owner can retrieve information about how many times their site is accessed and the most popular pages on their site. The success of an e-business's marketing will depend on how quickly it is able to recognise trends, anticipate new trends, and basically learn from the buying habits and preferences of its customers. The use of databases and information collected from customers, particularly buying preferences, interests, family makeup and so on, allows the business to segregate its market and more specifically target its marketing to the preferences of its clientele. For example, different newsletters or bulletins can be tailored to the age and interests of clients on an email list.

Blogging

A new and emerging marketing technique for an e-business is blogging. When perusing the net to purchase goods, a customer can be swayed by the recommendations of other customers who have added feedback to a blog. While this technique gives an e-business a more personal and informal 'voice', and has other benefits as Melissa Norfolk points out in [8.26], 'Is blogging good for business?', there is another side to the argument. The other side of seeking input from the public is that there is the risk of a disgruntled customer giving negative feedback or, worse, there is the risk of defamation.

[8.26]

Is blogging good for business?

What are blogs?

The word 'blog' comes from the combination of the two words, web and log. Blogs are online diaries or journals created by individuals or companies and stored on the Internet. Blogs generally consist of text and images appearing in chronological order with the most recent entry shown at the top of the page. According to technorati.com, there are some 71 million blogs worldwide (more than 250,000 in Australia), and 175,000 new blogs are being launched daily.

Why blog?

For individuals, blogs can be a way to express your views, build a social community with a similar hobby or interest, keep a travel diary or keep family and friends, who may not be physically close, updated with all your news and photos. For example: Snippets of Life is the online journal of Karen from WA who writes about life, art, partying, shopping & being a mother of 2 (karencheng.com.au).

For business, blogs can help you build stronger relationships with important target groups such as clients, the media, the general public and/or shareholders.

Simple, low cost PR. Blogs are a simple and fast way to put information online.

Establish expertise. Position yourself and your company as the expert and raise your visibility with your target market.

Extend communications and customer relationships. Blogs enable companies to present a human face and voice to the public. Blogs allow you to join customer discussions, respond to concerns, provide tips and insights or receive feedback.

Build community. Use blogs to grow group support around a cause, political issue, technology or hobby related to your product.

Test ideas or products. Because blogs are informal and conversational in nature you can publish an idea and see if it generates any interest or buzz.

Higher search engine rankings. Google and other search engines reward sites with lots of content that are updated often and have many inbound links. For example: Telstra's blog 'Now we are talking' aims to communicate with shareholders about new technologies (nowweareretalking.com.au).

So if you have an existing website and are prepared to add something at least every week or two, then adding a

blog to your site is a good idea as a good blog can help you build traffic, communicate and more importantly build trust. Many businesses choose to host their blog separate from their main business website. This can be useful as it separates the formal from the conversational and casual and prevents these two styles from conflicting. But don't be surprised if your blog starts getting more traffic than your main site!

Source: 'Is blogging good for business?' by Melissa Norfolk <www.melissanorfolk.net.au/resources/Volume5Issue4.pdf>.

Review & practice 5

- a List** some methods of marketing an e-business.
- b What** is a sticky site?
- c What** are sponsored links?
- d What** is a portal, and how can a portal be used for marketing an e-business?
- e What** does the *Spam Act 2003* prohibit?
- f What** is data mining?
- g What** is a blog?

► Exercises 8.23 to 8.26, pages 458–9

B2B: Business to business

Learning objective 10 B2B, or business-to-business, is the term given to Internet transactions between a supplier and another business. The aim is for efficient supply chain management. B2B is basically about large businesses (particularly, manufacturers) ordering electronically, efficiently and effectively from their suppliers so that they have the right inventory in store at the right time. For this to be done electronically, the systems of both the supplier and the buyer have to be able to 'talk to each other'. This is called 'business process interoperability' and is a key concept of B2B.

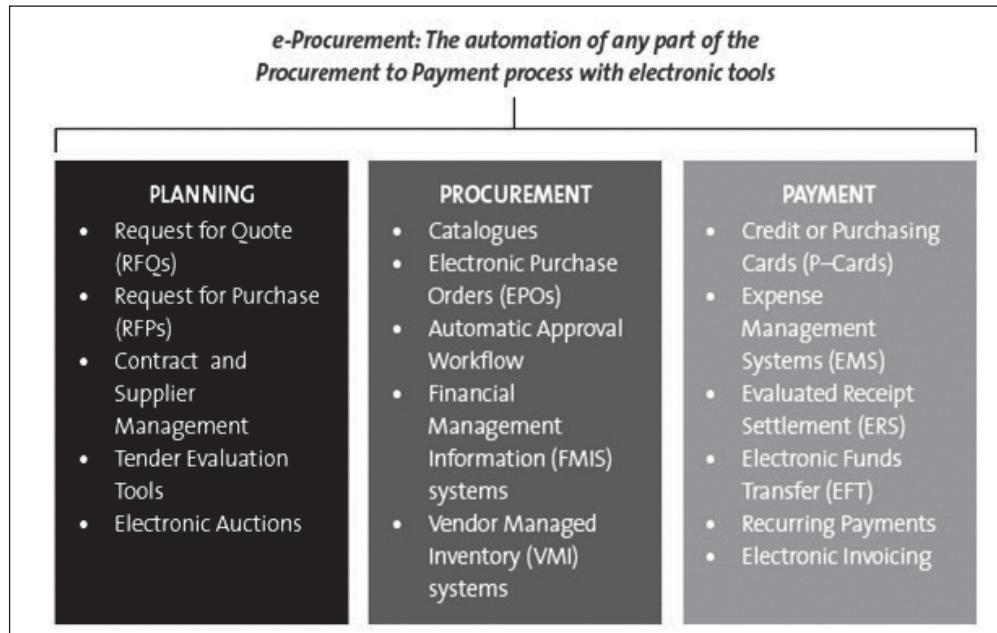
E-procurement

Governments (local, state and federal) essentially engage in the business of providing services – for example, health, education, police etc. In the business of providing these services, the government – at all levels – is also a buyer (procurer) of goods and services. It buys on a very large scale, so ensuring that efficient purchasing is in its best interests. It defines e-procurement as the automation of any part of the Procurement to Payment process with electronic tools.

The government sector's move towards using information and communication technologies in its own services provides a very good case study of how a 'business' can set out to increase efficiency, improve productivity and provide accountability. E-procurement is really about the interrelationship of methods for improving the procurement of goods and services, and this is done through the integration of electronic systems and processes.

As shown in [8.27], e-procurement is more than just having access to e-catalogues of goods for purchase. It is a systematic application of computer technology to the process of ordering, purchasing, and paying for goods and services. Applying technology to this system creates efficiencies and greater productivity, but it is essential also to ensure that the best price is achieved and that measures that allow for accountability are in place. This is because government spending must be very carefully monitored, as it is highly scrutinised.

[8.27]



Source:

<www.agimo.gov.au/publications/2006/june/strategic_guide_to_e-procurement/executive_summary>.

Supply chain management (SCM)

Adopting B2B transactions allows a firm to implement supply chain management. **Supply chain management** is the management of the flow of goods through a business. It entails ordering, allocating, manufacturing and distributing materials and finished products. This type of management is not new to business but, in the past, the technology available (known then as electronic data interchange, or EDI) was expensive and limited to very large organisations.

The Internet has provided a new and less expensive opportunity for retailers to link with their suppliers in order to stay informed about the availability and whereabouts of goods in the supply chain. This means that if a business needs to order a particular raw material, it can go online and look at its supplier's stock levels and ascertain how long it will take to have the supplies delivered. The ability to use the Internet for these types of decisions saves both time and money. Employees do not have to telephone or fax suppliers, because the information is readily available.

Accessing supplier inventory information before ordering, and providing sales forecasts that feed into suppliers' production systems, improve:

- sales forecasts
- document handling for orders
- inventory levels
- product feedback
- payment methods.

Implementing SCM has the following advantages:

- decreased costs of inventory because lower levels can be maintained
- increased accuracy of forecasts
- reduced costs (freight, transport, warehousing and product losses).

To implement SCM, many businesses will use the services of a third party to install the software and provide maintenance. One such third party is Logistics Systems International who have a site at <www.lsi.net.au>.

In terms of managing the supply chain, being able to look at a supplier's stock levels on the Internet alerts the business to problems immediately, allowing it to find alternative suppliers or make alternative arrangements. In spite of these benefits, security issues deter businesses from transacting on the Internet. As small business operators become more aware of the security standards available and the benefits to their profit levels, this reluctance may change.

As with B2C transactions, B2B transactions – such as SCM incorporating electronic ordering, invoicing and payment – will not change the business's accounting system. What changes is where the information is gathered from and how it is entered. The accounting system may be linked automatically and may collect the financial information electronically.

Review & practice 6

- a What** is B2B?
- b What** is e-procurement?
- c What** is supply chain management (SCM)?
- d How** are e-procurement and SCM similar or different?
- e What** are some of the advantages of SCM?
- f What** is the impact of e-procurement or SCM on the organisation's accounting system?
- g Why** would businesses be keen to improve the logistics of storing, moving and delivering inventory?
- h Is** the total integration of supply chain management 'a vision of e-commerce nirvana'?
- i What** is business process interoperability?

► Exercises 8.27 to 8.33, pages 459–60

Understandings

- Electronic business (e-business) has evolved with the development of computer and communication technologies, and will continue to do so.
- E-business offers an extra sales channel in addition to sales made over the counter, by telephone or mail, or through sales people. The transaction data is collected in electronic form and entered into an accounting package.
- Funds are electronically transferred from the consumer's account to the business after authorisation. The transaction data are collected in electronic form and entered into the accounting package.
- Sales forecasts and document handling for orders, tax invoices, adjustments, statements and inventory levels; product feedback; and payment methods may be improved through electronic business by:
 - accessing supplier inventory information before ordering
 - providing sales forecasts that feed into suppliers' production systems.
- Business risks, service interruptions, authentication, firewalls and encryption are essential considerations for control.
- Integrity of websites may be established by meeting the criteria set by such organisations such as Verisign and WebTrust.
- Various legislation affects e-business.
- E-business offers the opportunity to trade globally.

Further sources of information on e-business

E-business, having evolved with the development of computer and communication technologies, is an accepted, if not an expected, mode of doing business today. 'Change', then, is also an accepted and expected attribute of this technological age. It is the speed of this change that impacts most on a topic such as e-business. As Cynthia Mackey says in her article 'The Evolution of E-Business', 'teaching e-business right now is like teaching the Big Bang theory 30 seconds after the Bang. The future is still being formed' (*E-Business*, May 2003).

Just as trust in online transactions has increased due to improvements in security, the level of online purchasing will continue to increase as the take-up of broadband services becomes the expected norm and the provision of services is improved throughout Australia. As the Internet is the information source for the technological era, it is also, therefore, the key source of information about e-business on all levels G2B and G2C, B2B and B2C.

The following list of resources is a worthwhile starting point, but due to the nature of the topic, up-to-date resources and new developments should be sought out and researched.

- How the Internet works: <<http://computer.howstuffworks.com/internet-infrastructure.htm>>
- Benefits of e-business: <www.smartsmallbusiness.qld.gov.au/dsdweb/v3/documents/objdirctrlled/nonsecure/pdf/3037.pdf>
- Doing business online: <www.e-businessguide.gov.au>; <www.dbcde.gov.au/communications_for_business/broadband_and_internet/adoption_of_e-business>
- Case studies of businesses that have incorporated e-business: <www.e-businessguide.gov.au/resources/case_studies>
- Domain names: <www.internic.net/faqs/authoritative-dns.html>; <www.eps.com.au/related-links/domain-name.php>; <www.auda.org.au/about/info>
- Setting up your website: <www.business.gov.au>
- Search engine optimisation: <www.netregistry.com.au>
- Secure Sockets Layer (SSL) and Server-Gated Cryptography (SGC): <www.verisign.com/ssl/ssl-information-center/strongest-ssl-encryption/index.html>
- How to conduct secure e-commerce transactions: <www.dcita.gov.au>
- Law and the Internet: <www.oznetlaw.net>
- Spam: <www.dcita.gov.au/communications_and_technology/policy_and_legislation/spam>
- E-security: <www.dbcde.gov.au/communications_for_consumers/security/e-security>
- E-procurement: <www.agimo.gov.au/publications/2006/june/strategic_guide_to_e-procurement/executive_summary>

Exercises

★ 8.1 E-business

- a Using the *Yellow Pages*, list 10 businesses that have advertised a web address and 10 businesses that do not have a web address. (You can use <www.yellowpages.com.au>.)
- b Suggest reasons why the businesses listed without a web address might not have taken up e-business in some form.

★ 8.2 Research – e-business websites

Investigate as many business sites as you can, and compare the following:

- Purpose?
- Audience?
- Is there provision for online trading?
- Is a service provided?
- Ease of use?
- Design of website?
- Appeal?
- How well does the site operate?
- Is the site accessed through a portal?
- Does the business have a dedicated website?
- Is the site a portal? How does it earn its income?
- Is this business trading online?
- Does the business have a 'virtual presence' or 'web presence'?
- Does the business also have a shopfront?

★ 8.3 Nature of e-business

List some uses of the Internet for a business.

★★ 8.4 Nature of e-business

Consider the differences between e-commerce, e-presence, and a business address and phone number listed on a portal. Why would a business desire at least an e-presence, even if only through a portal?

★★ 8.5 Nature and benefits of e-business

If it can be said that 'businesses must ensure that the benefits outweigh the costs of any decision made', and if it is true that the Internet revolution is not going to go away, then what can be said of e-business? Are there any disadvantages in engaging in e-business?

★★★ 8.6 E-business

Write a proposal, in a report format, for a small business not currently using e-business. Your proposal should outline the nature and benefits that e-business could have for this firm, together with the costs and procedures involved in setting up the e-business functions.

★ 8.7 Web research – domain names

Research the web to find answers to the following questions:

- a What should be registered first – business name or domain name?
- b Does it matter which domain space is chosen for a domain name – .com/.com.au/.net or other?
- c A new domain space is .au.com. Does this space have the same restrictions as the .com.au domain space?

★ 8.8 Setting up an e-business

Outline the requirements of setting up an online shop by drawing a mind map or flowchart for a retailer considering e-business.

★★★ 8.9 Set-up costs of an e-business

Raspberry Ripple is a new business that the owner runs from home. The owner, Gillian, is thinking of turning her business into one that operates entirely on the Internet. She anticipates that, by conducting her business on the Internet, she will have an increase in revenue of approximately \$8 000. She has calculated that she will make many savings from conducting her business on the Internet, including the following:

Postage per week	100 items @ 50 cents each
Printing per week	100 items @ 25 cents each
Stationery	\$100 per month
Banking	1 hour per week @ \$25 per hour
Advertising	\$200 per year

However, Gillian is not sure of all of the relevant expenses she will encounter in an e-business.

- a Develop an analysis of costs associated with setting up Gillian's business as an online store.
- b Write a memo advising Gillian whether she should enter into an e-business.

★★ 8.10 Set-up costs of e-business

Prepare a spreadsheet that lists and totals the costs of setting up an e-business mentioned in the case study on the Mt Coot-tha Restaurant below. Assume the dedicated phone and ISDN line costs are \$1 000, and domain name registration costs \$120 per year.

Advancing with e-commerce

Mt Coot-tha Restaurant

The business

Mt Coot-tha Restaurant (MCR) is located on the outskirts of Brisbane, about nine kilometres from the city centre, and includes a restaurant, café and gift shop. The restaurant is owned by three partners including Russell Barrett, who introduced e-commerce into the business. The business was acquired in 1983 and employs 26 full time and 80 part time and casual staff members.

The idea

The increasing use of e-commerce as a business tool in the tourism industry prompted Russell Barrett to explore its uses for MCR. He felt the business needed to adopt e-commerce to increase the efficiency of internal business processes, including introducing an electronic order processing system. Russell sought the advice of information technology specialists and two employees who had e-commerce knowledge.

The investment

MCR's initial e-commerce investment of \$34 461 included the cost of purchasing new computers (\$9 000) and web development costs (\$6 000). The purchase of new pagers required an investment of \$4 800.

It took 60 hours of Russell's time at \$60 an hour to establish the new system. Two staff members spent

another 60 hours on the project, learning how to use the new system and entering data into the new system. This cost has been calculated at an hourly rate of \$20 totalling \$4 800 in staff time to establish the system.

Printers for the restaurant, bar and kitchens cost \$3 300 and the purchase of software and transmitter required an investment of \$3 000 each. Additional costs were involved in registering a domain name and installing a new telephone line.

Hurdles

The biggest challenge MCR faced in adopting e-commerce was the time required in the initial planning of their strategy. This was because the business adopted e-commerce as part of the core process of serving customers and the design of the system required a considerable amount of planning.

Results

The business has been successful in creating process efficiencies by using e-commerce within their internal activities. These process efficiencies have led to significant cost savings for the business, quantified at \$120 328 per year. The biggest cost saving has come from adopting the electronic order processing system. Since the orders are processed more efficiently, waiting staff require less time to perform their functions. This has



allowed the restaurant to expand its business without having to employ an additional two staff members to handle extra customers.

The restaurant operates in two shifts, a three-hour shift in the afternoon and a five-hour shift in the evening. The cost of each waiting staff member is \$19 per hour and the restaurant is open seven days a week. Therefore, the reduction in the requirement of two waiting staff members for two shifts saves \$110 656 a year. Online banking has also been very useful for MCR because it saves the partners 2.5 hours a week in travel time to the bank to make deposits and transfer balances between accounts. At \$60 per hour for a partner's time, online banking saves MCR \$7 800 each year.

MCR now pays staff wages online which saves an administrative employee 1.5 hours each week. At \$19 per hour for this staff member MCR saves \$1 482 per year.

Prior to using e-commerce the business wrote 50 cheques each week for salaries. The bank fee was 15 cents per cheque amounting to a total of \$390 per year on cheques that are no longer required due to online banking.

Ongoing costs of maintaining e-commerce infrastructure are \$1 800 a year consisting of fees paid to the Internet service provider of \$960, website hosting costs of \$480 and telephone costs of \$360.

Future

The company does not deal with any of its suppliers online apart from making some online payments. As the company's key suppliers start to use e-commerce MCR will benefit further from its e-commerce initiative.

Source: <www.noie.gov.au>.

★★ 8.11 Level of e-business integration

a Compare and contrast the following business sites:

- <www.designergiftbaskets.com.au>
- <www.norac.com.au>
- <www.billabong.com.au>
- <www.woolworths.com.au>
- <www.ebay.com>
- <www.greengrocer.com.au>
- <www.limos.com>
- <www.pinklily.com.au>
- <www.hitwise.com.au>
- <www.bluecollar.com.au>
- <www.swapAce.com.au>
- <www.destra.com.au>
- <www.freshmums.com.au>
- <www.redchillimarketing.com>
- <www.weddingcentral.com.au>
- <www.microsoftonline.com>

When visiting the websites, consider the following questions:

- i** Is this site an example of B2B or B2C? Or is it a business that merely has a web presence? Or is it portal?
- ii** What are its products/services?
- iii** How are orders placed and filled? How are payments made by customers?
- iv** What is its policy regarding the security of information gathered from this site?
- v** How is the information supplied by customers protected by this business?

★★ 8.12 Web research – a portal

Investigate the website for Wedding Central Australia <www.weddingcentral.com.au> and answer the following questions:

- a** What type of e-business site is www.weddingcentral.com.au?
- b** Would you expect to see shopping cart technology in this site? Why? Why not?
- c** Are any e-marketing strategies being used by this e-business? List any you see.
- d** What was one of the first steps that this business needed to take to begin operating as an e-business?
- e** How does Wedding Central Australia earn income?
- f** What are the advantages for the consumer in using this type of e-business?
- g** Find a similar type of site that would also be considered to be a portal.

★ 8.13 Web research – ‘clickwrap agreement’

Find the origin of the phrase ‘clickwrap agreement’.

★★ 8.14 E-business and the accounting function

Prepare a report of 500 words for Ms Josie Dargavel, owner of a hairdressing supplies business, who wants advice on whether or not to incorporate e-business strategies into her wholesale business. She particularly wishes you to focus your advice on how e-business will affect the accounting side of the business. What types of additional expenses would she expect to see in her income statement, and are set-up costs the only costs to consider?

★★ 8.15 Web research – security

Examine the web page extract below from <www.twodollars.com.au> and answer the questions that follow:

- a** What do the initials SSL stand for?
- b** List three measures, other than SSL, mentioned in the screen below that are in place to ensure security of a customer's information.
- c** Name another business/company that offers similar services to Thawte.
- d** Why does <www.twodollars.com.au> provide this information for customers?

SECURITY

Twodollars.com.au utilises Thawte SSL Web Server Certificates to offer secure communications by encrypting all payment data to and from the site. The order is accepted via a 128bit SSL encrypted payment form.

Security System

The Twodollars.com.au server is located in a data centre which is staffed 24 hours a day. Access is restricted via secure electronic swipe cards. Early warning systems are in place to monitor fire, intrusion, vandalism and theft. Security systems are maintained by Chubb. Our Web Hosting Company runs a CCTV (closed circuit television) system to monitor the data centre and digitally record movements.

Offsite Data Storage

Backup tapes are rotated offsite to storage vaults on a weekly basis. This provides added security for customers' data. The offsite vaults are thermostatically controlled, monitored for temperature and humidity and have dust filtration and pest suppression systems.

[Click here to visit the Thawte Web Site](#)

★★ 8.16 Online banking

Here is a list of the major banks in Queensland. Search their websites and determine whether or not they offer customers online banking services. What security measures are visible on the website?

Bank	Provides online banking?	Security measures?
Bank of Queensland Commonwealth Banking Corporation National Australia Bank Westpac ANZ The Rock Suncorp-Metway		

★★ 8.17 E-business security

Online auction sites have gained in popularity in recent times. Compare two such sites and determine whether or not consumers are protected when purchasing goods through them. (Try <www.ebay.com.au>, <www.ebid.net>, <www.dontmissout.com.au>.)

★★★ 8.18 Security issues and e-business

You have been chosen to write a column for a magazine aimed at small and medium enterprises. Your first topic is to address the security issues that e-businesses are facing in using the Internet and what they can do to protect themselves.

★ 8.19 Research – cybercrime

Research the latest developments in cybercrime. Prepare a pamphlet for small business owners on the threats to their security from:

- malicious intent
- data and identity theft
- fraudulent intent.

★ 8.20 Research – online security

Research ‘two-factor authentication’, ‘multi-factor authentication’ or ‘mutual authentication’. What do these terms mean, and how do they improve the security of online transactions?

★ 8.21 Research – online security

Research the latest developments in online security. Prepare an oral presentation of 10 minutes duration to be presented to a Rotary Club made up of small business owners.

★ 8.22 Online security

Prepare a training manual for staff in a small business on the topic of online security.

★★★ 8.23 Research – marketing websites

Look at the website <www.flowers.com.au> and at the various pages in this site, including the ‘Members Zone’ and ‘Gift Reminder’ pages.

- a What marketing strategies are used because the business is an e-business?
- b Why offer a ‘free competition’? What is the purpose of this e-marketing strategy?
- c What services are offered to e-clients through this website?
- d Why offer e-cards?
- e Is this business set up for online transactions, or does the customer then have to go through a gateway to another website for a secure transaction?
- f What is the purpose of the section on privacy?
- g Look at other e-business websites and make a list of the ideas you can find being used to attract and keep customers.
- h Is this a secure site? How do you know if it is, or is not, a secure site?
- i Would this be considered a ‘sticky’ site?

- ★ **8.24 Research – marketing an e-business**
What is viral marketing? Write a paragraph about it and its relationship to e-business.
- ★★ **8.25 Research – marketing an e-business**
What strategies do businesses use to drive traffic to their websites? What types of analytical services are available to website owners, and how can they make use of this information? Prepare a report on marketing for an e-business.
- ★ **8.26 Research – marketing an e-business**
Where has the term ‘blogging’ come from? Is it good for business? Why are businesses taking on this form of communication with their customers – that is, what are the advantages of blogging for the customer, and for the business? Are these strategies very different from the way a ‘bricks and mortar’ business markets itself?
- ★★ **8.27 B2B**
A key word in B2B transactions is ‘interoperability’ or ‘business process interoperability’. Research the meaning of this word/phrase, and write a paragraph about what it means in relation to e-procurement or supply chain management (SCM).
- ★★ **8.28 Oral presentation – supply chain management**
How can SCM benefit a business? Research SCM, find case studies that exemplify how it is put into practice, and present a 10-minute oral report.
- ★ **8.29 Legislation that affects e-business**
What, in the main, does each of the following Australian pieces of legislation relating to e-businesses and the use of the Internet seek to address?
- *Electronic Transactions Act 1999*
 - *Privacy Amendment (Private Sector) Act 2000*
 - *Spam Act 2003*
 - *Cybercrime Act 2001*
- ★★★ **8.30 Oral presentation – e-business accounting and security**
You are a consultant to a small business association and you have been asked to prepare a 10-minute presentation to members on e-business accounting and e-business security. You realise that the audience will be made up of business people – some of whom engage in e-business and at various levels.
You decide to structure your presentation to ensure that you cover accounting practices and security for: (1) businesses that use email and online banking, and which have an e-presence but do not engage in online sales transactions; and (2) businesses that engage in online transactions using a shopping cart and various payment options for customers, including credit card transactions conducted through a third party via a secure gateway.
In addition to your oral presentation, prepare a pamphlet that can be distributed after your presentation so that the business people have a summary of the information you present and your contact details for follow-up private consultations.
- ★★★ **8.31 Assignment – compare and contrast various e-businesses**
Compare and contrast (show similarities and differences between) three businesses that feature in case studies, and prepare a report on your findings.
(See <www.e-businessguide.gov.au/resources/case_studies>.)
Consider in your report how each business integrated e-business. Compare and contrast:
- 1** Aspects of the business:
 - a** e-security
 - b** the investment to start the business
 - c** the results of integrating e-business
 - d** any failures that have been noted.

- 2 The current website:
 - a Glean any additional information. (Often there is a section on the company that gives the business's historical detail.)
 - b Has the business moved on to full e-commerce?
 - c Have there been changes in intellectual capital and human resources?
 - d Examine the current supply chain for the business – does it appear to use SCM?
- 3 Your analysis of the business and the information available:
 - a How receptive were the employees to the business being or becoming an e-business?
 - b How receptive were the customers to the business being or becoming an e-business?
 - c How did the business ensure its success in its integration of e-business?
 - d What was the most important issue for the business to overcome?
 - e Since the case study on the business was written when the business began, how does the business appear to have advanced as a result of its use of e-business? Compare and contrast what was offered (as per the case study) and what appears to be on offer now (as per the website).

★★★ 8.32 **Assignment – report to the owner of a business plan incorporating e-business**

The business plan at <www.afsse.asn.au/pyoe/div2winner2001.pdf> has been a previous winner of the Plan Your Own Enterprise competition. Analyse this business plan and decide how e-business could be integrated into it. Decide at which level e-business integration should be developed in the first instance, and write a report to the owner of this business plan explaining both the nature and benefits of integrating e-business and also the costs and risks involved.

★★ 8.33 **Research new development in e-business**

Research something of interest to you that has not been mentioned in this chapter and is relevant to e-business. Write 100 words about this new development in e-business.

9

Chapter

Accounting for language

- The language of accounting
- Key terms
- Technical accuracy
- Structural guidelines for text
- Planning guidelines

Already know	<ul style="list-style-type: none"> • How to speak and write English
Need to know	<ul style="list-style-type: none"> • The language of accounting • Key terms used in accounting questions • How to structure text in answering questions on accounting • Guidelines on how to plan well-structured answers to accounting questions
Using this knowledge	<ul style="list-style-type: none"> • <i>Provides information for decision-making</i> in well-structured sentences, paragraphs, memos, letters and reports • <i>Assists in discharging accountability</i> by providing memos, letters and reports in a consistent manner

ACCOUNTING VOCABULARY

Formal language
Informal language
Letter
Memo

Object
Report
Sentence
Well-structured sentence

Learning objectives

After completing this chapter, you should be able to:

- 1 understand the language of accounting
- 2 understand the key terms used in accounting questions
- 3 apply structural guidelines to accounting questions
- 4 apply planning guidelines to accounting questions.

The language of accounting

Learning objective 1

Communication is an integral part of an accountant's role. While accounting is in itself a language used to communicate financial and other information to people, organisations and government, there are also inherent language demands in the learning and assessment of the subject.

As an accounting student, you will be expected to:

- select and sequence information into a logical response
- present information in a range of communication forms such as paragraph responses, letters, memos and reports
- use appropriate technical terms in your writing
- demonstrate your knowledge and understanding of accounting concepts and terms
- interpret and analyse financial data
- apply knowledge to given theoretical situations.

This chapter is designed to provide you with a guide to addressing the language requirements of the course and, specifically, the knowledge, interpretation and evaluation criteria. It includes:

- the language of accounting
- key terms
- structural guidelines for text
- planning guidelines.

Key terms

Learning objective 2

In answering a question, the level of response demanded of a student is indicated by the key term used in a question. Table [9.1] provides a glossary of the key terms often used in accounting questions and their meaning.

[9.1]

Key term	Explanation
Account for	Give reasons for
Analyse	Examine the elements contained in the information
Calculate	Work out an accurate response/result
Classify	Arrange items, quantities or objects into groups with similar characteristics
Comment on	Present your opinion
Compare	Recognise similarities (quantities, values or features may be compared)
Contrast	Highlight or emphasise differences
Cycle	A series of steps, events or stages which is repeated in a set order or pattern continuously
Define	Give a clear explanation of a term or concept
Demonstrate	To explain a process; to prove or show to be true
Derive	Present a logical sequence of steps to arrive at an expression, equation or result
Describe	Represent, picture or portray; say what something is; give an account or a picture in words
Determine	Arrive at an answer, show required steps or strategies; present the facts about a problem
Discuss	Investigate or examine an argument; present different aspects of a subject
Draw (sketch)	Depict an object, idea or system pictorially, as in a clearly defined illustration, diagram or flowchart
Evaluate	To establish the value, quality, importance, merit, relevance or appropriateness of financial data
Explain	Make clear; make known in detail; give reasons; provide examples
Express	To give a clearly stated and definite response in the requested format
Extend	Enlarge upon a given response, supplying further details
Extrapolate	Use given data or information to project a future outcome
Find	Arrive at an answer by your own strategy unless otherwise specified
Flowchart	A diagram showing the logical and sequential development of a series of steps, choices or ideas leading to a rational outcome
Identify	Establish or select; recognise or name
Illustrate/exemplify	Support or disprove a general statement by providing a specific instance or example, in words
Indicate	Clearly name or state the relevant points; mark and identify a feature on a diagram
Interpret	To give meaning to information presented in a variety of forms, e.g. words, symbols, diagrams, maps or graphs



Key term	Explanation
Justify (demonstrate/explain)	Provide sound reasons or evidence on which your response is based
List	Concisely present points, reasons or responses, in words, one below the other, or as dot points
Outline (in words)	Provide a structure for; give main points or features; give a general explanation or description
Present	Put forward a suggestion, idea or explanation for consideration
Refer	Look at a passage, table or diagram to gather information
Show	Illustrate; give step-by-step instructions; include all intermediate steps or workings
State	Clearly present in written form
Suggest	Propose an alternative form, response or plan of action
Synthesise	Bring together a series of ideas by presenting essential ideas and information in fewer words and in an appropriate sequence
Verify	Validate a particular result to show that it is true or correct

Technical accuracy

All writing should be free of technical errors. Errors are often difficult for a writer to detect. The following suggestions may help:

- 1 Try to word process responses and take advantage of spelling and grammar checks.
- 2 Read the material aloud (or to yourself), consciously reading for 'sense'.
- 3 Read again for 'meaning'.
- 4 If preparing a draft response, use every second line to write; then every other line can be used for comments and references.
- 5 Ask someone else to read and critique your written work.

Structural guidelines for text

Learning objective 3

Writing sentences

A sentence is a fully formed thought. It is important to be able to express accounting information in sentence form and use accounting terms to show a clear understanding of concepts. The ability to write clear, concise and accurate sentences is extremely important because they form the basis of paragraphs, memos, letters, reports and other response genre.

EXAMPLE 1

State one reason for studying accounting.

Studying accounting is beneficial for all people wishing to start their own business.

The sentence presents the main point in a brief clear format. A sentence must contain a subject, verb and an object. For example:

Subject	Verb	Object
Studying accounting	is	beneficial for all people wishing to start their own business

Review & practice 1

In your own words, briefly explain each of the following in sentences:

a accounting

b evaluating performance.

Writing paragraphs

The development of effective writing skills requires attention to structure. Paragraphs are the building blocks of everything that you write. Paragraphs should have the following elements:

- **A topic sentence** – this states the main idea of the paragraph and lets the reader know what is going to be discussed in more detail within the paragraph. A good topic sentence states both the topic and central idea of the paragraph. It states the main idea clearly but does not give specific examples.
- **Sentences of evidence** – these provide details that support and develop the key concept or are used to give examples. The idea contained within the paragraph should be fully developed before moving on.
- **A closing sentence** – this gathers and unites the ideas within the paragraph or leads on to the next paragraph.

EXAMPLE 2

Knowledge – paragraph structure

Explain why it is necessary to order accounts in the ledger.

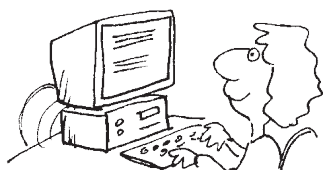
One simple approach is to construct the response using the above structure (topic, evidence and closing sentences) and listing dot points to be included in the sentences, as shown in [9.2].

[9.2]

Topic sentence	<ul style="list-style-type: none"> • Need the general ledger to be kept in an organised and systematic manner for ease of reference.
Sentences of evidence	<ul style="list-style-type: none"> • A business may have many hundreds of accounts in a ledger, so a system is needed. • Accounts need to be located efficiently. • Grouping of accounts in the ledger can vary, but an example of such an order is REALOe. • Numbering is also used. Methods vary and are referenced. • A list of accounts in order is called the chart of accounts.
Closing sentence	<ul style="list-style-type: none"> • Essential for ease of use and for efficiency in recording and processing accounting information.

A possible response is as follows:

Topic sentence	In the general ledger it is necessary to keep accounts in an organised and systematic manner.
Sentences of evidence	Accounts are ordered for ease of reference by those who have access to the records. Ordering accounts is an efficient method of dealing with these records. There are many methods that can be applied to ordering accounts. One such method is REALOe (revenue, expenses, assets, liabilities and owner's equity).
Closing sentence	The list of accounts in order is called a chart of accounts.



Review & practice 2

Using the points in [9.2], write a well-structured paragraph explaining why it is necessary to order accounts in the ledger.

EXAMPLE 3

Interpretation and evaluation – paragraph structure

Consider the following situation and, in paragraphs, evaluate the practice/s used.

B Stockwell owns and operates a newsagency. Over the past 12 months she has acquired a personal portfolio of shares worth \$40 000 from the profits earned by the business. This is shown in the balance sheet.

[9.3]

Topic sentence	<ul style="list-style-type: none"> Recording personal portfolio of shares in balance sheet – incorrect.
Sentences of evidence	<ul style="list-style-type: none"> Contravenes the accounting entity assumption. Only transactions between the business and the owner should be included. Makes information less relevant by containing non-business information. Decisions are based on performance of the business, not the owner.
Closing sentence	<ul style="list-style-type: none"> Decision-makers need reliable, relevant information upon which to make decisions and evaluate the performance of the business.

Steps to use to address interpretation and evaluation questions such as the one in example 3 are:



- 1 Identify the accounting practice used within the business.
- 2 Explain whether it is appropriate or inappropriate and why, by referring to relevant accounting concepts. This should be linked to the specific practice/s identified in step 1.
- 3 The final reason/s for a practice or concept being adopted is to enhance the quality of financial information in order to fulfil one or more of the objectives of accounting. Refer to one or more of the objectives of accounting in the closing sentence.

An annotated response indicating the steps above is shown in [9.4].

[9.4]

TOPIC SENTENCE	→	When recording the assets of a business in a balance sheet, the owner must take care to separate out his/her own personal assets.	←	Identifies the main point of the question
SENTENCES OF EVIDENCE	→	Recording personal assets in a business's end-of-period report contravenes the accounting entity assumption. This assumption states that, from an accounting perspective, the owner and business are distinct entities. In other words, only transactions <i>between</i> the owner and the business should be recorded. The owner's personal assets are irrelevant and, if included in the reports, they would be inaccurate.	←	States that the practice is incorrect Explains the 'why'
CLOSING SENTENCES	→	Decision-makers need reliable, relevant information upon which to make decisions. Reports that do not follow accepted accounting assumptions cannot be relied upon for decision-making or performance evaluation by the owners and others.	←	Links to qualitative characteristics of financial information Links to relevant objectives of accounting

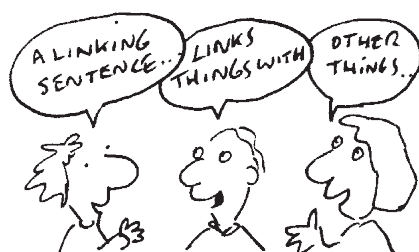
Review & practice 3

Consider the following situation and, in well-structured paragraphs, evaluate the practice/s used.

Lucien Duffy owns and operates a bookshop. He purchased land at a value of \$80 000 five years ago. The land was recently revalued at \$250 000. This is the amount recorded in the balance sheet.

Linking sentences

Sentences within a paragraph should show a logical development of ideas and indicate how one idea is connected to another. One way to achieve logical flow within a paragraph is to link each sentence to the following sentence by including common information.



The following phrases can be used to connect the writing with the topic or show the development of ideas:

- 'Thus it can be seen that ...'
- 'Hence it is clear that ...'
- 'From this it can be argued that ...'
- 'The evidence suggests that ...'
- 'When using this assumption we can conclude that ...'

Linking paragraphs

When there are a number of paragraphs, the order in which they are written should show a logical development of ideas. Each paragraph should lead on from the one before using appropriate linking words [9.5]. These connecting words assist the logical flow within the piece of writing.

[9.5]

Link	Linking words
An additional idea	in addition, furthermore, moreover, besides, also, too, and, and then, as well, beyond that, for one thing, in fact, next, what is more
An opposite idea	on the other hand, in contrast, however, nevertheless, instead, still, but, yet, although, even though, whereas, in spite of, despite, on the contrary
Compare	as well, both/neither, in the same way, likewise, similarly
Concede a point	certainly, no doubt, granted that, of course
Restate or explain	i.e., that is, in other words
An example or illustration	for example, for instance, in particular, on such, yet another one
A conclusion or summary	in conclusion, in summary, to conclude, to summarise, finally, in brief, in other words, lastly, to sum up, on the whole
A result	therefore, consequently, hence, thus, as a result, and so, because of this, as a consequence, for this reason, so
Confirmation	in fact, indeed
Sequence	first, subsequently, finally
Qualify	perhaps, possibly
Emphasise	above all, especially, in fact, in particular, indeed, most importantly, surely

Review & practice 4

Write a well-structured response outlining the objectives of accounting.

Writing memos

Businesses need to communicate information to internal and external parties. The inter-office memo is one of the most common forms of internal communication. A memo or memorandum consists of headings and the message, using either informal or formal language. The formality of the language will depend on the tone the sender wishes to achieve. The message of the memo is stated concisely and, if appropriate, point form may be used. A salutation ('Dear Bob') or complimentary close ('Yours faithfully') is not required. Usually the sender's name or initials appear at the end of the memo. Two examples of memoranda are shown in [9.6].

[9.6]

Informal

Memo

To: ANDREW
From: HEATHER
Date: 13 February 2010
Subject: BALANCE SHEET

Could we get together to talk about the figures in the balance sheet?

I am available any time on Thursday or in the morning on Friday.

HD

Formal

Memorandum

To: ALL STAFF
From: H DOUGLAS, MANAGER
Date: 13 February 2010
Subject: INVENTORY CONTROLS

Due to increasing losses in stock, the following adjustments to current procedures have been put in place:

- 1 A stock requisition must be completed and authorised before goods are removed from stockroom.
- 2 Only authorised personnel may access the stockroom. The stockroom must be locked at all times.

HD

Report memos

Reporting accounting information often involves analysis and interpretation.

- **Analysis** examines the elements contained in the information.
- **Interpretation** attempts to explain the meaning of those elements.

Analysis and interpretation of information aids interested parties in decision-making. Interpretation of the data will lead to some recommendations to improve the position of the business (if warranted). A report memo analysing a cash budget is shown in [9.7].

[9.7]

SUMMARY
The summary is a concise assessment of the overall situation as determined by the author.

Memorandum

To: A Kennedy, Manager
From: H Douglas, Accountant
Date: 13 February 2010
Subject: CASH BUDGET JUNE–AUGUST 2010

I have examined the business's cash budget and schedule of GST for June to August 2010 and make the following comments:

SUMMARY**EXPECTED RECEIPTS**

Sales

EXPECTED PAYMENTS

Purchases

Other payments

Cash balance

CONCLUSION**RECOMMENDATIONS**

HD

INTRODUCTION

The introduction states the nature of the information that follows, and how the analysis has been conducted.

BODY

The body consists of the detailed elements organised in a logical sequence. Appropriate headings and sub-headings could be included.

CONCLUSION

The conclusion contains a summary of the situation.

RECOMMENDATIONS

The recommendations section may consist of advice or courses of action that could be useful in achieving an improved situation.

Writing letters

Business letters need to be well presented because they are an external form of communication and serve to promote the image of the business. They must be concise, accurate in detail with zero tolerance of technical errors. A formal tone is used in a business letter.

The letter should be set out in a clear and easy-to-read format. This will encourage the recipient to take note of the contents.

There are many different reasons for writing a business letter.

- Business letters may be written by an accountant to give advice to a client on a particular issue or area of concern, or to confirm matters that have been discussed.
- They can be used to acknowledge/confirm/thank – these letters should be polite and to the point. An acknowledgment or confirmation is often a matter of simply advising another party that you are attending to their business.
- Business letters may advise outside parties of many different things, such as change of services/personnel. The reader (client) should be left with the impression that there has been an improvement in your business and that they will benefit from the information contained in the letter.
- They can be used to collect a debt – the purpose of a letter requesting payment of a debt is to receive overdue monies. These letters are often called collection letters. A business may develop a series of such letters to be used at different periods, with different terms of debt – for example, 'one month overdue', 'two months overdue', and so on. Naturally, it is expected that these letters become more demanding as they progress through the stages.



An example of a letter of advice that also highlights the presentation features of a letter is shown in [9.8].

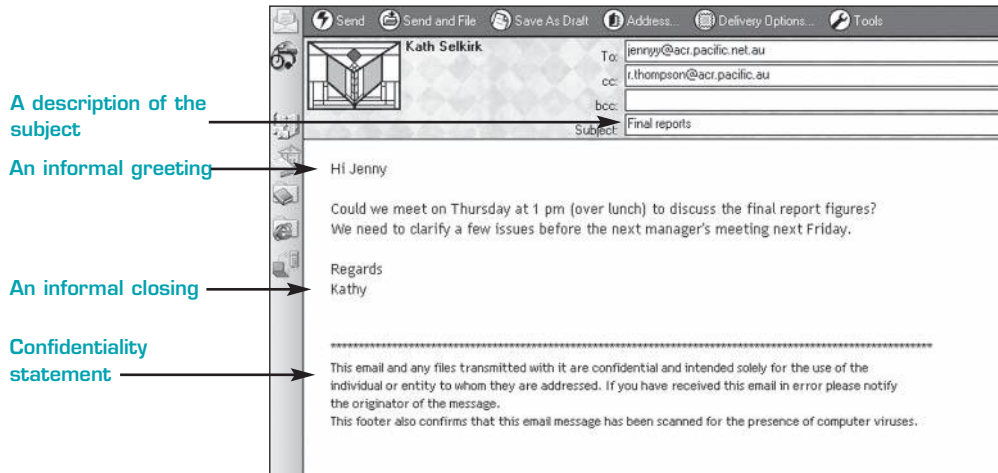
[9.8]

HELLIWELL & CO. CHARTERED ACCOUNTANTS		
12 August 2010	←	DATE In full in day/month/year format.
The Treasurer Bracken Ridge & District Lifestyle Association MT GRAVATT QLD 4122	←	INSIDE NAME AND ADDRESS No full stops after initials. No commas in date or address. As shown, no punctuation in bottom line of address.
Dear Sir/Madam	←	SALUTATION 'Dear Sir' or 'Dear Madam' is used when the correct title is not known.
FINANCIAL REPORTS 2010	←	SUBJECT HEADING Topic of letter
<p>Please find enclosed a signed copy of the financial reports for the year ended 30 June 2010. Also enclosed is an extra copy of the <i>Statement by Committee</i>, which I ask you to sign and return for placing on my file.</p> <p>I also confirm the following matters, which were discussed in relation to the audit:</p> <ol style="list-style-type: none"> 1 There is a balance in the historical balancing account of \$1146.75 credit, which should be investigated. 2 The balance in the accounts payable account of \$2611.00 includes a carried forward amount from the previous financial year of \$541.00, and this should be examined. 3 No superannuation expense has been included in the figures for the year on the basis that none was paid. Although a liability for superannuation did exist, I understand this is to be brought up to date as soon as possible. 4 The position regarding the GST paid during the year is subject to further review by you to determine if the amounts were accurate. 		BODY OF LETTER
Yours faithfully	←	COMPLIMENTARY CLOSE 'Yours faithfully' is used if parties do not know one another. 'Yours sincerely' is used if the name of the receiver is known.
T Hanson Senior accountant	←	WRITER'S NAME POSITION WITHIN BUSINESS
enc	←	ENCLOSURES Other documents included with letter are indicated by this notation.

Writing emails

Emails are an informal method of communication used by businesses both for internal and external communication. Although the format is set by the mailbox program used, there are still a number of conventions that need to be followed when writing emails. These are shown in [9.9].

[9.9]



Review & practice 5

Read the following article and then write two emails (one formal and the other informal) to all employees advising them on the use of emails.

Email replacing face-to-face communication: pros and cons

SmartPros Editorial Staff

Menlo Park, California, 1 January 2003 — Email is the preferred communication method for managers when corresponding with employees, according to a survey of executives conducted by temporary staffing firm Accountemps.

When asked how often email substitutes for face-to-face communications, 92 per cent of respondents said managers often send an email message rather than meet one-on-one.

Executives also were asked, 'Aside from face-to-face communication, which of the following is the most effective way to communicate with employees?' Forty-three per cent said they use email, 31 per cent telephone, and 20 per cent videoconferences to communicate with employees.

'For busy managers, email is the next best thing to meeting in person,' said Max Messmer, chairman of Accountemps. However, Messmer cautions against using it exclusively. 'Face-to-face meetings reduce the potential for miscommunication, allowing individuals to share ideas and feedback with the benefit of vocal inflections, facial expressions and body language,' he said.

Messmer advises managers to choose the medium appropriate for the message. 'If the topic will involve debate or requires reaching a group consensus, arrange a meeting or conference call to address the matter,' he said. 'For one-way communication or inquiries requiring little discussion, email may be the most effective and timely vehicle.'

Source: <www.smartpros.com>.
© 2003 SmartPros Ltd. All rights reserved.

Writing reports

A very large part of the writing done by an accountant takes the form of a report, either to management or to a client. Its primary purpose is to inform senior management or the client about particular issues, and it will often be used as a basis for making decisions. If the report is to be used for decision-making, then the information it contains and the style in which it is written will need to be both analytical and persuasive.

General guidelines to assist you with report preparation are shown in [9.10].

[9.10]

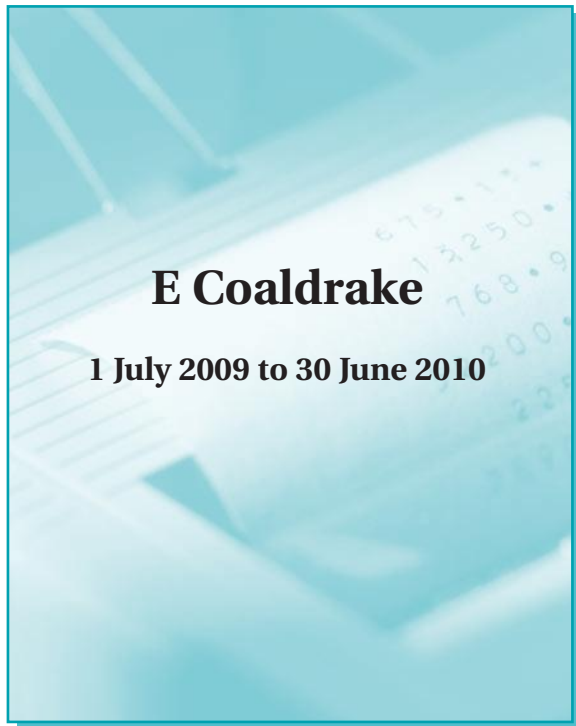
Know the purpose of the report	<p>Why is the report being written?</p> <p>Is it to describe something, inform someone, consider alternative options, analyse financial data, or persuade someone?</p> <p>The purpose of the report will determine its length and the structure used.</p>										
Know your audience	<p>For whom are you writing this report? This is very important because it will determine what you include in your report, and the level of detail. Many students assume that the reports they write as part of their assessment are for their teachers. This is not usually the case. In most of the problems set for assignments, you are asked to consider a business situation and to write a report to the managing director or the owner with suitable recommendations, just as you would if you were working and had to prepare a report for senior management or for a client who has hired you.</p>										
The language of reports	<p>Usually the level of formality used in the language of reports is determined by the purpose of the report and the reading audience. If the report is for a client of your firm, then the style of language needs to be formal (impersonal). This is also the style of writing expected in assignments. The reason for a degree of formality in your writing is to achieve a level of impartiality in your analysis of the issues. Therefore, avoid the use of words such as 'I', 'We', 'This writer ...', 'This author ...' and so on.</p>										
Common criteria for reports	<p>All reports need to meet certain criteria. They include the following:</p> <ul style="list-style-type: none"> • The purpose of the report should be apparent to the reader. • The organisation of the report should be logical and clear to the reader. • The accounting, financial or business content should be accurate. • The discussion in the report should be coherent. • The presentation of the report should be neat. • The writing style should be clear and concise. 										
The organisation	<p>The following suggestions for the organisation and stages of writing a report are guidelines only. The purpose and structure of your report will be determined by the requirements of the particular assignment you are given.</p> <p>The neat organisation, or structure, of a report is not required for aesthetic reasons. Its layout is designed to help readers understand the discussion in the report. Headings and subheadings help to signal to the reader the content being addressed. In addition, headings and subheadings should be numbered in a consistent style so that the reader quickly appreciates when a new topic is beginning or when the present topic is being expanded.</p> <p>There are a large variety of report formats or structures. The format of a report will be determined by the purpose of the report and the audience for whom it is intended.</p> <p>A report may include all or some of the following sections:</p> <table> <tr> <td>Title page</td><td>Body of the report</td></tr> <tr> <td>Table of contents</td><td>Conclusion</td></tr> <tr> <td>List of figures</td><td>Recommendations</td></tr> <tr> <td>Summary</td><td>Appendices (placed in order of reference from text:</td></tr> <tr> <td>Introduction</td><td>A, B, C, ... or i, ii, iii ...)</td></tr> </table>	Title page	Body of the report	Table of contents	Conclusion	List of figures	Recommendations	Summary	Appendices (placed in order of reference from text:	Introduction	A, B, C, ... or i, ii, iii ...)
Title page	Body of the report										
Table of contents	Conclusion										
List of figures	Recommendations										
Summary	Appendices (placed in order of reference from text:										
Introduction	A, B, C, ... or i, ii, iii ...)										

An example of an informal report can be found in chapter 14, pages 723–4.

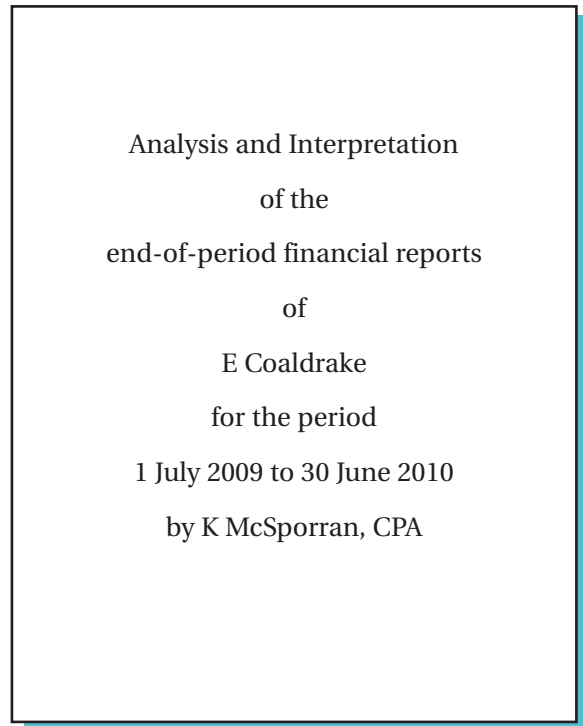
An annotated formal report indicating the format, structure of information and the linkages used in the analysis and interpretation of final reports of E Coaldrake (chapter 12) is shown in [9.11].

[9.11]

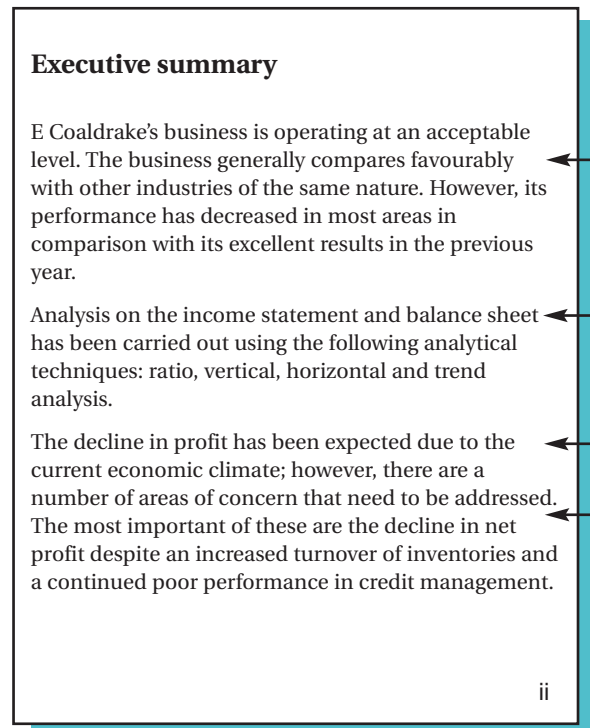
Cover



Title page



Executive summary



The executive summary provides an overview of the subject matter, methods of analysis, findings and recommendations.

Overview of the report outlining the subject matter very briefly.

Outlines how the analysis was undertaken.

Outlines any problems raised by the report.

States the conclusions that have been reached.

Table of contents

Provides a list of numbered sections in the report and their page numbers.

Table of contents	
	Executive summary .....ii
	List of figures .....iv
1	Introduction .....1
2	Analysis and interpretation .....2
2.1	Profitability .....2
2.1.1	Gross profit .....2
2.1.2	Net profit .....2
2.1.3	Return on equity .....3
2.1.4	Return on assets .....3
2.2	Effectiveness of management policies .....4
2.2.1	Turnover of inventories .....4
2.2.2	Turnover of accounts receivable .....4
2.3	Financial stability .....5
2.3.1	Current ratio .....5
2.3.2	Quick asset ratio .....5
2.3.3	Debt/equity ratio .....6
3	Conclusion .....7
4	Recommendations .....8
5	Bibliography .....9
	Appendices .....10
	iii

Table of contents should:

- be worded exactly as the headings appear in the report
- include page numbers.

Lists the figures contained in the report and the reference numbers.

List of figures**List of figures**

- Figure 1 Trend of net profit to net sales
 Figure 2 Percentage of operating expenses to sales
 Figure 3 Debt/equity ratio

iv



Introduction

1 Introduction

This report has been commissioned to produce an independent assessment of E Coaldrake's business for prospective purchasers of this going concern.

The report intends to present an overview of the past performance of E Coaldrake's business over the previous accounting period and to assess the current financial position of this enterprise. While the scope of this report is mainly the financial results of the 2009/2010 financial year, some results from the previous four years have been used to gauge the trends occurring in this business. Where appropriate, results have been benchmarked against industry standards to give a better assessment of the performance and standing of this business within the industry.

The financial position of E Coaldrake has been assessed for the period 1 July 2009 to 30 June 2010. This report will focus on three main areas of analysis:

- profitability
- effectiveness of management policies
- financial stability.

Commonly accepted ratios have been performed within the categories given above ...

1

Purpose of report

Intention of report

Scope of report

How analysis was undertaken

Body

Area of report

Major section

Subsection

Analysis of figures to highlight anomalies. Examine the elements of each ratio to find anomalies or reasons for results.

Use of graphs provides a visual illustration of variances.

2 Analysis and interpretation

2.1 Profitability

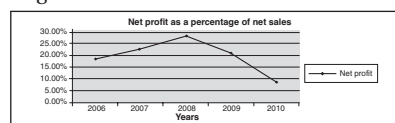
2.1.1 Gross profit

This ratio indicates that, for every dollar of sales, 49 cents represents gross profit. The gross profit ratio has declined since the previous year but is still acceptable given industry standards. Gross profit decreased by 1.59%, but this is despite an increase in sales overall of 12.5%. The decrease in the gross profit ratio is due to the increase in cost of goods sold of 30.61% ...

2.1.2 Net profit

The net profit ratio has experienced a serious decline from 21% to 8.7%, as illustrated in figure 1. This indicates that for every dollar of sales, almost 9 cents is returned as profit whereas in the previous accounting period it was 21 cents in every sales dollar ...

Figure 1



2

Conclusion

← States the main inferences that can be drawn from the discussion.

3 Conclusion

This enterprise is able to meet its immediate and short-term liabilities. Funding of the business is balanced between internal and external sources. Its gross profit margin is at a satisfactory level; however, the net profit margin has decreased and is low.

Gross profit has decreased despite a moderate increase in sales. This is due to a 31% increase in the cost of goods sold. The subsequent increase in general and administrative expenses has also meant that the net profit has been depressed.

Although the rates of return on owner's equity and assets are also decreasing, they are favourable when compared with industry averages. These two ratios have decreased significantly due to the decrease in net profit over the past year.

Inventory turnover has improved but this has not resulted in an increase in net profit. This is attributable to an almost 30% increase in net operating expenses.

The entity's credit management is poor and is contributing to a decrease in cash flow evidenced by a decreasing bank balance despite an increase in cash sales of 37.5%.

7

Recommendations tell the reader what to do: what decisions should be made, what course of action to take, which alternative solution is superior or what further work needs to be undertaken.

Recommendations should be feasible and appropriate to the problem.

Recommendations are written for action, so they should be as concrete and specific as possible. They should read as a list of things the client should do.

Recommendations**4 Recommendations**

- 1 The current ratio is to be monitored carefully to ensure it does not fall below its present level.
- 2 Current liabilities need to be gradually reduced to improve the quick asset ratio.
- 3 Alternatively, a greater cash flow must be generated, possibly through better credit management.
- 4 Sourcing of funds for the business should be monitored to ensure the business takes full advantage of economic conditions. E Coaldrake should ensure capital invested in the business is earning more than it would if invested in other, less-risky alternatives.
- 5 The net profit ratio indicates the need for attention. Expenses should be monitored carefully and strategies implemented to reduce selling and administrative expenses.
- 6 Investigations should be carried out into:
 - a why depreciation on buildings has increased 614% but no additional purchase of the asset has occurred
 - b why the cost of goods sold has increased 31%, negating the increase in sales of 12.5% and resulting in a decrease in gross profit.
- 7 Immediate attention should be given to debt collection – the current rate of collection is extremely unfavourable and should not continue.
- 8 Current management of inventories is effective and should be maintained.

8

Bibliography ←

List of reference material consulted during research for the report.

5 Bibliography

Greig, P, Mackay, J, Beaumont, S, Sagner, R 2008
Accounting concepts and applications, 4th edn,
 Macmillan Education Australia, Melbourne.

Referencing is required:

- to acknowledge sources
- to give readers information to identify and consult the sources to make sure the information is accurate.

9

Information that supports the analysis but is not essential to its explanation, validates your conclusions or pursues a related point should be placed in an appendix.

→ **Appendices****Appendices**

- A Financial reports for the year ended 30 June 2010
- B Vertical and horizontal analysis of the financial reports
- C Ratio analysis of the financial reports

Each separate appendix should be lettered (Appendix A, Appendix B, Appendix B1, Appendix B2, Appendix C, etc.). The order they are presented in is dictated by the order in which they are mentioned in the text of the report. It is essential to refer to each appendix within the text of the report.

10

Preparing a datashow or multimedia presentation

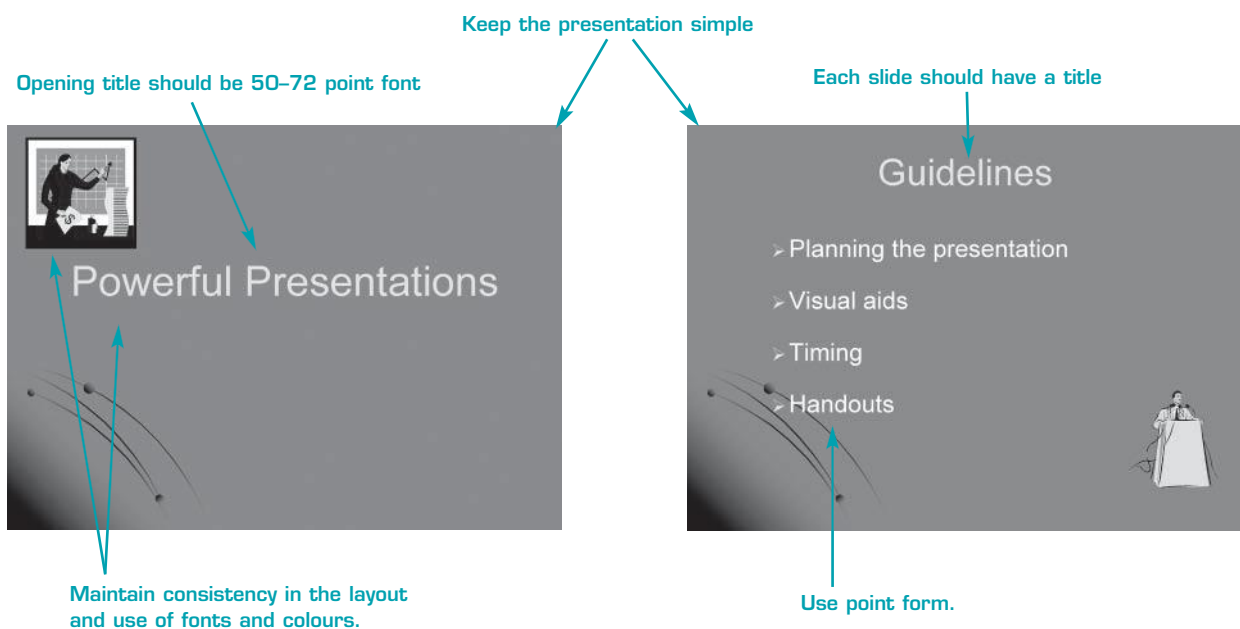
Once you have completed your planning of the subject matter, it should become clear to you where the use of a visual aid will assist your presentation. When you produce a visual aid, ensure that it meets the criteria given in [9.12].

[9.12]

Simple	Bullet points are better than sentences
Accurate	Diagrams should be drawn to scale and data checked
Font size	At least 18 points and bold
Clarity	Visual aids should be clear and simple, with labels
Visible	The audience must be able to see what is on the visual
Avoid clutter	Too many bells and whistles will kill the message
Colours	Avoid combinations that are hard to read, such as red/green
Horizontal format	Information is better absorbed if presented in a horizontal rather than portrait format. Avoid mixing formats
Pictures	Use if they contribute to the message, but do not overuse
Background	Computer projections normally require a dark background and light text

Packages such as Microsoft PowerPoint are a flexible complete presentation package. Everything you would need for a presentation – black and white or colour overheads and slides, handouts, speakers notes, outlines – can be accomplished with PowerPoint. Remember that it is simply an aid to enhance the presentation; you still need to input and present the content to your audience. A sample presentation is shown in [9.13].


[9.13]



Use a dark background and a light text.

Visual aids

- Use bullet points
- Avoid red/green combinations
- Use pictures if they contribute to message
- Audience must be able to see the visual
- Visual aids must be labelled
- Diagrams should be to scale




Use graphics/animation to enhance the presentation, but do not detract from the content.

Restrict the number of colours and fonts to one or two only.

Summary

- Presentations should be planned
- Know the audience
- Visuals are only an aid to enhance the presentation
- Logistics of room need to be taken into consideration



Restrict the number of points: 4–6 per slide.

Planning guidelines

Learning objective 4 The key to effective writing is planning. When preparing to answer a question, you will need to do the following.



1 Identify the key elements of the question.

- What is the key term used? (explain, compare etc.)
- What is the key concept/idea to be addressed? (area of accounting)
- How do I have to present the response? (paragraphs, memo etc.)

2 Plan the response.

- Collect your ideas or thoughts.
 - list
 - brainstorm.
- Organise the information into a logical sequence.
 - mind maps (e.g. Venn diagrams, spidergrams)
 - graphic organisers (e.g. tables, flowcharts)
 - 5 Ws and H (who, what, when, where, why and how).
(A combination of the above strategies may also be used.)

3 Write the draft response using the appropriate presentation.

4 Re-read the draft and edit where necessary to ensure:

- sentences are fully formed
- paragraphs have a topic sentence, supporting sentences and a concluding or linking sentence
- paragraphs are linked and follow a logical sequence.

5 Prepare your final response.

EXAMPLE 4

In a well-structured series of paragraphs, compare and contrast a bank statement and a bank reconciliation statement.

1 Identify the key elements of the question:

- | | |
|---|--|
| a What are the key terms used? | Compare – show similarities
Contrast – show differences |
| b What is/are the key concept/s? | Bank statement
Bank reconciliation statement |
| c How is the response to be presented? | Linked structured paragraphs |

2 Plan the response:

- | | |
|--|--|
| a Collect your ideas/thoughts/information | List/brainstorm <ul style="list-style-type: none"> • Bank statement prepared by bank • Bank reconciliation prepared by business • Bank statement shows cash transactions between business and bank • Bank reconciliation highlights items not in bank statement but in business's records • Both provide bank balance at the end • Both deal with cash transactions • Both prepared for same period of time • Bank reconciliation shows bank balance at end of month from business's perspective |
| b Organise the information | Mind map – Venn diagram |

Bank statementD
i
f
f
e
r
e
n
c
e
s

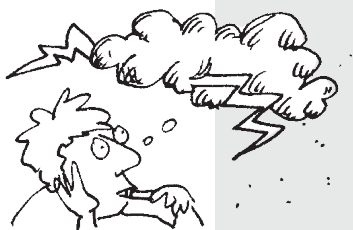
- Prepared by business
- Shows record of cash from business's perspective when compared with bank statement
- Highlights differences (items not in bank statement)
- Does not show bank balance at beginning of month

Similarities

- Deals with cash transactions
- Provides bank balance at end of month
- Deals with same time period

D
i
f
f
e
r
e
n
c
e
s

- Prepared by bank
- Shows records of cash from bank's perspective
- Highlights beginning and ending balance and movement between these balances

Bank reconciliation

5 Ws and H

This strategy requires you to ask yourself a series of questions (who, what, when, where, why and how) relating to the topic.


Who prepares the bank statement?	Prepared by the bank
Who prepares the bank reconciliation statement?	Prepared by the business
What is a bank statement?	A statement that details the deposits and withdrawals made during a particular month and the resulting final cash balance
What is a bank reconciliation statement?	A statement that highlights the cash transactions that do not appear in the bank's records but are in the business's cash books
When is a bank statement prepared?	Usually at the end of the month
When is a bank reconciliation statement prepared?	After the bank statement has been received and checked against the business's cash journals
Why is a bank statement important?	Provides an independent record of the business's cash transactions. Assists with controls over cash
Why is a bank reconciliation statement important?	Provides a comparison of the bank's and business's records. Assists with controls over cash
How is a bank statement used?	DR column is checked against cash payments journal CR column is checked against cash receipts journal
How is a bank reconciliation statement used?	Records items that are to appear in the bank statement in the future

Note: If a logical question cannot be formed from one of the 5Ws or H, omit it. It is also possible to have more than one question for each W or H.

Review & practice 6

- a** Plan a response to the following:
'Justify the use of specialised journals for cash transactions.'
- b** Write the draft response to part **a** using the appropriate presentation. Re-read the draft and edit where necessary. Prepare your final response.





Area of study:

Reporting and decision-making

- RD1** Fully classified financial reports
- RD2** Cash flow statement
- RD3** Financial reports and ratios
- RD4** Managerial decision-making
- RD5** Cash budgeting

10

Chapter

RD1

Fully classified financial reports

Accounting assumptions

- Assumptions underlying accounting reports

Financial information – underlying qualitative characteristics

- Qualitative characteristics of accounting reports

Accrual accounting and balance-day adjustments for the complete accounting process

- Accrual accounting and balance-day adjustments
- Other balance-day adjustments

Presenting and classifying end-of-year reports

- Classified income statement
- Classified balance sheet

Part 1 – Accounting assumptions

Already know

- Accounting is based on underlying principles called assumptions
- An income statement and balance sheet are prepared at regular intervals for decision-makers and to provide information for analysis and interpretation
- Definition and effect of the accrual method of accounting
- Accrual accounting recognises transactions and events when the revenues are earned and expenses are incurred

Need to know

- Definition of accounting assumptions
- Definition and impact of the five accounting assumptions (accounting entity assumption, monetary assumption, historical cost assumption, accounting period assumption and continuity assumption)
- Preparation of a range of balance-day adjustments requiring calculations
- Classifications used in end-of-period reports
- Preparation of classified reports
- Definition and application of each qualitative characteristic

Using this knowledge

- *Helps to evaluate the performance* of a business through providing information that relates to a given period of time. The matching of revenues and expenses enables management to see how the business is performing and whether there are areas for improvement.
- *Provides information for decision-making.* The accounting assumptions that underlie the complete accounting process aim to ensure that information in accounting records is relevant and reliable and therefore enhance the decision-making process

ACCOUNTING VOCABULARY

Accounting entity assumption
Accounting period assumption
Assumptions

Going concern (continuity) assumption
Historical cost assumption
Monetary assumption

Learning objectives

After completing this section, you should be able to:

- 1 outline five of the assumptions that underlie accounting in Australia
- 2 understand that accounting records kept and reports prepared by businesses are based on these assumptions.

Assumptions underlying accounting reports

Learning objectives 1, 2

Accountants working in business or in an accounting practice comply with standards to ensure the integrity of the accounting profession and financial information produced. **Assumptions**, also known as principles or conventions, are important underlying facets of any accounting report. Although assumptions are conceptual in nature, they have practical significance in the accounting process.



Assumptions are concepts, rules or regulations that are established standards on which all other decision-making in accounting is based.

Accounting is based on some fundamental assumptions. These assumptions are accepted by the accounting profession as valid concepts, rules and regulations that the accountant follows. Such concepts, rules and regulations allow for uniformity in financial records. Uniformity assists with understanding the framework in which financial reports are prepared. This will lead to decision-making being undertaken from an informed position.

These principles or conventions are the basic, underlying facets of any accounting report, whether it is prepared here in Australia or another country. Similarly, when reading and using an accounting report, it is expected that it will contain similar qualitative characteristics no matter where it is prepared. It can be argued that the rules and regulations of each country, as laid down in the accounting standards produced by each country's professional body, may result in certain differences, but the fundamental concepts are the same. A move towards international accounting standards would be impossible without congruence in the fundamental assumptions of accounting throughout the world.

Australia implemented International Accounting Standards in January 2005.

The basic concepts inherent in accounting, commonly known as accounting assumptions, are:

- accounting entity assumption
- accounting period assumption (and the matching principle)
- monetary assumption
- historical cost (objectivity) assumption
- going concern (continuity) assumption.

Accounting entity assumption

Recall from chapter 1 (page 15) that the **accounting entity assumption** is fundamental to what accountants do and to accounting itself.



The **accounting entity assumption** presumes that a business enterprise (entity) has an existence separate from the private financial affairs of its owner/s.

As the owner and the business are considered to be separate from the point of view of the business, this assumption allows for a distinction to be made between the owner and the business. The owner is the source of capital investment for the business. Equity means 'ownership', so the amount of capital contributed by the owner represents the owner's interest in the business. The business, being a separate entity, repays this amount of capital investment to the owner should the business cease operations. The distinction between the owner's private interests and their investment in a business is important to ensure that information contained in the financial records only reflects the activities of the business. This means that the information will be relevant to the business and produce more reliable information for decision-making purposes and performance evaluation.

EXAMPLE 1

William Cheng owns a private residential house valued at \$400 000 and has invested \$100 000 cash in a new business. The \$100 000 cash would form part of Cheng's business accounting records. The \$400 000 house would not be shown in the business's accounting records.

Accounting period assumption

Learning objectives 1, 2

Recall from chapter 2 that the **accounting period assumption** is a basic concept on which accrual accounting is based.



The **accounting period assumption** divides the life of an enterprise into arbitrary time periods.

Most businesses define an arbitrary time period as one financial year. This facilitates the calculation of profit (loss) and gives interested parties some indication of how successful a business has been over the designated period.

Another interested party is the Australian Taxation Office. A sole trader receives the profits from the business and pays tax on any profits earned by the business in a given time period. This time period is one financial year. In addition, the owner of a business will need to know how the business is performing and will therefore find it necessary to determine profit (loss) and prepare end-of-period reports (income statement and balance sheet).

EXAMPLE 2

Trish Walden commenced her business on 1 October 2009. The accounting period for her business in the first year is the commencement date of 1 October 2009 to 30 June 2010, the end of the financial year. In the following year, it would be 1 July 2010 to 30 June 2011.

Matching principle

As the accounting period assumption allows the division of the life of a business into set time periods, usually one year, it is necessary to ensure that every revenue and expense item recorded fits neatly into this set time period. The concept of accrual accounting allows the recognition of revenues and expenses to occur even though actual cash has not been received or paid. The fact that revenues and expenses are *earned* or *incurred* in the financial year (accounting period) determines that these amounts should be included in any calculation of profit or loss for that period. Balance-day adjustments are necessary to bring the revenues and expenses into line with the current financial year determined by the accounting period assumption.

EXAMPLE 3

Caroline Clemmont is the owner of a milk bar. On 28 June, she paid \$5 000 for disposable cups, napkins and takeaway cartons. The cartons are not opened before 30 June and will be used up in the next two months. The financial year ends on 30 June, so the expense of these items should be included in the next financial year and not the current one, because they will not be physically used until the next accounting period. Although cash has been paid in the current period, it is recorded as an asset, a 'prepaid expense'.

Monetary assumption

Learning objectives 1, 2



Money value must be in a common currency – for example, A\$, £, ¥.

Money is the common denominator with which economic activity is measured and recorded in the accounting process. The monetary assumption allows unlike items to be quantified and recorded, enabling the calculation of profit (loss) figures, preparation of the income statement and balance sheet, and analysis of these figures.

The **monetary assumption** assumes that all transactions can be recorded in money terms.

This assumption does not permit the recording of any data in accounting records and reports that cannot be quantified in money terms. Such data can, however, be included in notes and/or footnotes to the financial reports.

EXAMPLE 4

A business has two items to incorporate into its financial reports. The first is the acquisition of a new plant site at Hemmant worth \$800 000. The second is the development of a new improved employer/employee taskforce group, which is viewed by management as providing considerable current and future benefits to the firm. The first of these items, the new plant, would be recorded in the financial reports. The second, although an asset in the broad sense of the word because it will give future economic benefit to the business, cannot be quantified. Therefore, this information would be recorded as a note attached to the financial reports and would not be quantified.

Historical cost (objectivity) assumption



Objectivity: actually existing.
Subjectivity: based on opinion.

The **historical cost (objectivity) assumption** refers to the recording of items at their original purchase price.

This approach allows for an objective and verifiable value, rather than a subjective value, to be entered into the books of the enterprise. It is important to ensure that the information contained in the financial reports is reliable (able to be depended upon) for decision-making purposes. The historical cost assumption allows for this to occur.

EXAMPLE 5

Land was purchased at a value of \$140 000 two years ago. Its current value is considered to be \$350 000. For accounting purposes, the land would be recorded at the original purchase price of \$140 000.

This approach still does not eliminate the subjective nature of accounting, as many figures need to be estimated. As most of the estimates are based on information and methods that can be verified, accounting figures are generally considered objective.

Going concern (continuity) assumption



The **going concern (continuity) assumption** refers to the fact that accounting reports are prepared under the premise that the entity will continue to operate in the foreseeable future.

As it is not possible for any business person to predict how long an entity will exist, this assumption allows for the calculation of the profit (loss) figures of the business.

EXAMPLE 6

A business has been operating for 20 years. It is anticipated that it will continue its operations indefinitely.

If there is evidence that the entity will not continue and that liquidation is likely to occur, this assumption would be set aside, particularly in times of economic recession. Auditors may choose expected liquidity values or some other valid costing method to report financial information, especially if conclusive evidence exists that the entity will severely curtail the scale of operations or will not continue. Any such changes must be disclosed.

Review & practice

1

- a What** are the five basic assumptions on which accounting is based?
- b What** important principle is fundamental to the accounting period assumption?
- c How** do balance-day adjustments contribute to a more accurate profit figure?
- d When** valuing assets at historical cost, is this objective or subjective? Why?
- e What** is meant by the expression 'going concern'?

► Exercises 10.1 to 10.9, page 525

Applying accounting assumptions to end-of-period reports

Learning objective 2 How does each of the accounting assumptions explained above underpin the financial reports of a business? Although tangible evidence is not always obvious in the end-of-period reports, the effects of the assumptions are crucial if the information contained in the reports is to be relied on for making decisions. Table [10.1] summarises the effects of the accounting assumptions on the end-of-period reports.

[10.1]

Accounting assumption	Effect on accounting reports prepared at end of period
Accounting entity assumption	The accounting equation is derived from this assumption. The owner (Oe) is separate from the business (A – L). Therefore, the balance sheet reflects this assumption. The income statement links with the balance sheet through the profit (loss), which has an impact on capital (Oe).
Accounting period assumption	It is because of this assumption that the life of the business is broken down into arbitrary periods that allow profit (loss) to be measured and the net worth of the business to be determined. Implicit in this assumption is the notion of the matching principle, where revenues and expenses are adjusted so that they apply only to the accounting period in question to determine an accurate profit (loss). As the same arbitrary time periods are used from year to year, it means comparisons of financial reports can be made from one period to the next.
Monetary assumption	The financial reports are prepared in money terms assuming that all figures are equal in value and type regardless of timing or the original currency of the account.
Historical cost (objectivity) assumption	In the balance sheet, assets are valued at their historical cost because it is objective and verifiable. Where an asset has been revalued according to Australian accounting standards, this must be disclosed by way of a note to the accounts.
Going concern (continuity) assumption	The values given to items in the financial reports are based on the assumption that the business is to continue. An asset's value may be considerably less if it is known that the business is not to continue and a firesale of its assets will be required because the business is in receivership. These types of issues may be reflected in the financial reports if deemed necessary by government bodies.

'Firesale' is the term used to describe the sale of an asset in a short space of time due to pressure for cash in order to settle debts.

Part 2 – Financial information – underlying qualitative characteristics

Already know

- How to apply accounting assumptions to financial records
- An income statement and balance sheet are prepared at regular intervals for decision-makers and to provide information for analysis and interpretation

Need to know

- Qualitative characteristics of financial information in general-purpose financial reports
- Definition and application of each qualitative characteristic (relevance, reliability, materiality, comparability and understandability)

Using this knowledge

- *Helps to evaluate the performance* of a business through providing information that relates to a given period of time. The matching of revenues and expenses enables management to see how the business is performing and whether there are areas for improvement
- *Provides information for decision-making* through the application of qualitative characteristics of accounting information to ensure that decisions can be made with the assurance that information is of a particular standard
- *Accountability can be discharged* through the provision of reliable and relevant information in the financial reports of the business for a given period of time

ACCOUNTING VOCABULARY

Comparability

Materiality

Qualitative characteristics

Relevance

Reliability

Understandability

Learning objectives

After completing this section, you should be able to:

- 1 state the qualitative characteristics of financial reports
- 2 explain how these qualities of financial information assist in fulfilling the objectives of accounting
- 3 identify practices and procedures that are consistent with the assumptions
- 4 identify the application of the qualitative characteristics in financial reports.

Qualitative characteristics of accounting reports

Learning objective 1

The basic objectives of financial reporting are to provide information for making decisions about the enterprise and evaluating the performance of the business.

The accounting assumptions provide the underlying set of principles to help meet these objectives. There are also specific characteristics that financial information should possess in order to further enhance the usefulness of accounting information in the decision-making process. Compliance with these **qualitative characteristics** is not binding, but members of professional bodies agree to comply with the guidelines. Adherence to these guidelines assists in providing better information for decision-making and for evaluating performance.



Qualitative characteristics are those attributes that financial information should possess if it is to be included in financial reports.

The qualitative characteristics of accounting reports are categorised by their effect on the:

- selection of financial information
- presentation of financial information.

When preparing end-of-period reports, there are also a number of constraints on these qualitative characteristics. Two of these will be discussed:

- timeliness
- costs versus benefits.

Selection of financial information

Three characteristics of quality apply to the selection of information for financial reports:

- relevance
- reliability
- materiality.

Relevance and reliability are the two primary qualitative characteristics and are of equal importance.

Relevance

Relevance means financial information must have value in terms of:

- assisting users in making and evaluating decisions about the allocation of financial, physical and human resources
- reflecting accountability by the preparers of financial information.

EXAMPLE 7

If the terms of sale of a building provide for a lease-back arrangement, then this information is relevant and should be available to interested parties.

Reliability

Reliability means financial information must be free from:

- bias (that is, the information must be neutral); and
- undue errors.

EXAMPLE 8

Kay Engineering was concerned about the accuracy of the financial information presented in its reports. The company decided to contract an auditor to check the financial records to ensure undue errors were not present. This approach guarantees compliance with reliability.

'The inclusion of immaterial information in financial reports may well impair their understandability.' [SAC 3:27]

Disclosure is the process by which notes are attached to financial reports explaining items of importance.

Materiality

Although information may be relevant in the general operations of an enterprise, it might not be of significance when the entity is reporting. Materiality is also concerned with whether decision-making will be affected by the omission, misstatement or non-disclosure of any item of information and the aggregate or overall effect such error/s may have on the financial information. If the effect is of little significance, then it can be concluded that it is not material.

EXAMPLE 9

C & T Ltd wanted the accountant to report all financial information to the shareholders on a developmental project worth \$450 million. When the accountant prepared the information, the figures were rounded to the nearest thousand. For the size of the project, this approach would be a suitable application of materiality. Alternatively, if the project was worth \$450 000, this would be an unsuitable approach, as amounts of \$1 000 would be material.

Presentation of financial information

The qualitative characteristics that apply to the presentation of financial information, particularly to end-of-period reports, are:

- comparability
- understandability.

Comparability

Comparability in financial reports is achieved by comparing:

- an entity at one point in time and over time
- an entity with other entities at one point in time and over time.

Additional notes may have to be included in order to make such comparisons.

Improved accounting procedures should be introduced when appropriate. Any new procedures should not be disregarded because of the characteristic of comparability. This has often been the case because of the misconception that consistency must be sustained to achieve comparability.

EXAMPLE 10

Jo Simke's financial reports show two columns of figures. The first column is for 2010 figures and the second is for 2009 figures. She has also included notes when changes have been made to the method of the valuation of the figures. This approach allows for a valid comparison to be made.

Understandability

Financial information must be presented in a form that assists users in its understanding. Various factors need to be considered, as shown in [10.2].

[10.2]

Factors for consideration	Examples
1 Who are the users of the information?	Do the users have knowledge of the accounting concepts?
2 Will relevance or reliability be sacrificed for understandability?	Although relevance and reliability are usually of prime importance, would understandability be more applicable on this occasion?
3 Will understanding of new financial information be sufficiently aided by disclosure of other additional information?	Consider the addition of attached notes. Will this be sufficient?

EXAMPLE 11

Jim Carmen Ltd operates a small but profitable business. The accountant prepares the general-purpose financial reports. To assist with understanding, graphics (graphs and diagrams) are also included. In addition, understandability was considered to be more important than detailed relevant information when releasing facts on contracts entered into which would take effect in a future accounting period.

Constraints on qualitative characteristics

There are two broad constraints on accountants being able to provide reports with the characteristics of quality:

- timeliness
- costs versus benefits.

Timeliness

'The time available to gather and report financial information is a constraint on providing relevant information.'
[SAC 3:39]

By the time financial information has been dissected for its relevance and reliability, then tested for its materiality, it may lose its relevance due to the time span that has occurred. This raises the issue of when and how often reports should be available to interested parties.

EXAMPLE 12

Jill Clarke needs information about the financial position of her company before the final figures are available from her accountant. She has asked her accountant to use professional judgment in preparing a report on the financial stability of her company for immediate submission to her bank manager. Although this report would sacrifice some degree of reliability, its timeliness will be beneficial.

Costs versus benefits

An important question that needs to be considered is: 'Will the provision of certain financial information stimulate more benefits than the costs incurred?' At this stage there is no universally accepted method of calculating costs and benefits of financial information – it is currently a matter of professional judgment. However, it is important to remember that many benefits can flow from information being available to interested parties outside the entity, although this may occur at some cost to the business.

EXAMPLE 13

A business proposed to allocate costs across 23 cost centres. If this additional information is of little use to interested parties, then the cost of gathering and allocating the costs would outweigh the benefits to the business.

Review & practice 2

- What** are the five qualitative characteristics of accounting information?
- What** are two constraints on these qualitative characteristics?
- What** does it mean to say that reports are comparable?
- What** factors affect the understandability of a report?



- e **Why** are notes to the accounts sometimes necessary?
- f **Which** qualitative characteristic requires that information in reports be free from bias and undue error? Does this mean that every figure in an accounting report is correct? Explain your response.
- g **Why** are cents shown in reports for some accounting entities and not in others?

► Exercises 10.10 to 10.12, page 526

Applying qualitative characteristics to end-of-period reports

Learning objective 4 How does each of the qualitative characteristics explained above underlie the financial reports of a business? These attributes (qualities) are applied to the financial information contained in the end-of-period reports.



The following questions [10.3] can be applied to end-of-period reports to determine whether or not they have the qualitative characteristic expected by users.

[10.3]

Selection of financial information	Relevance	<ul style="list-style-type: none"> • Is all relevant information included either in the report or in notes to the reports? • Does the information in the financial reports assist the owners and managers in making and evaluating decisions about the allocation of the monetary resources? • Does the information help users predict future situations and confirm evaluations made in the past?
	Reliability	<ul style="list-style-type: none"> • Is the information accurate and free from bias? • Can informed and valid judgments be made based on the information in the reports? • Is there anything in the reports that is included but cannot be substantiated with concrete, reliable evidence?
	Materiality	<ul style="list-style-type: none"> • Is the reliable and relevant information presented with materiality in mind? • Are the actual figures represented, or has rounding occurred for ease of reading? • Is there too much immaterial information given that clouds understandability?
Presentation of financial information	Comparability	<ul style="list-style-type: none"> • Has a consistent approach been used when preparing reports over a number of years? • If changes in methods have been used, have they been noted so that correct comparisons can be made between figures in different years' reports?
	Understandability	<ul style="list-style-type: none"> • Is the format of the report consistent with generally accepted accounting formats? • Is information presented in an overly summarised format so that materiality and reliability are questionable? In other words, is there an attempt to hide something unfavourable in the report? • Would graphic representations of the data improve the understandability of the report, particularly for those without accounting knowledge? • Are graphs and charts presented accurately and with purpose, without detracting from other important information in the report? • Could some items be summarised more effectively under fewer headings without losing any clarity?



Constraints on relevant and reliable financial information	Timeliness	<ul style="list-style-type: none"> • Has the report been presented in a timely fashion after the end of the period? • Can relevant decisions be based on the information in the report due to its timeliness, or is the information too old to be reliable?
	Costs versus benefits	<ul style="list-style-type: none"> • Does the cost involved in changing the accounting information system to show a further breakdown of selling expenses into selling, distribution and marketing bring about better information that will benefit the entity? • Is the cost of hiring personnel with specialist IT skills beneficial, so that the reports of the organisation can be published as PDF files on the website of the business, giving users more timely information? • Should the entity publish its reports as a glossy publication with pictures of its activities as a marketing exercise, as well as an information-sharing exercise for users of its reports?

Review & practice 3

You have just been employed as a junior accountant and have examined the material left by your predecessor. You find the balance sheet and notes prepared on 31 December 2010 for Barry Bromiley's business, BB Consultancy (shown below). You have noticed that it does not measure up to the qualitative characteristics that you know apply to the information in end-of-period reports such as a balance sheet, nor is it based on some of the accepted accounting assumptions. Examine the report and answer the following questions.

- What** are the inadequacies of this statement?
- Why** does the report not measure up to what is required in terms of accounting assumptions?
- Why** does the report not measure up to what is required in terms of qualitative characteristics? Explain.
- How** could the situation be rectified?
- Why** is it important that end-of-period reports be based on the accepted accounting assumptions and qualitative characteristics?

BB Consultancy

Bazza's balances as at 30 June 2010

Capital, Bazza		\$30 000
Bazza's holdings:		
Cash in hand and in the till	100	
Other currency	\$US500	
Accounts receivable	4 000	
Computer	3 000	
Boat and trailer	40 000	
	<u>47 600</u>	
Bazza's owings:		
Loans and other amounts owing	<u>17 600</u>	\$30 000



Notes:

- The computer is on loan from a friend and does not belong to the business.
- The boat and trailer are personal assets.
- Accounts receivable actually total \$4 821.85.
- A statement from the bank shows an overdraft of \$11 443.
- Barry withdrew \$10 000 cash from the business in the financial year ending 30 June 2010.
- An income statement has not been prepared.

► Exercises 10.13 and 10.14, page 526

Accounting standards

The accounting standards published each year by the professional bodies are rules, practices and procedures with which members of the accounting bodies must comply. These standards embody the assumptions and qualitative characteristics on which end-of-period reports are based. These end-of-period reports are sometimes referred to as general-purpose financial reports.

When an entity is a company, there are further requirements for compliance governed by the *Corporations Act 2001*, and when the company is publicly listed on the Australian Stock Exchange, there are even more compliance regulations that must be met. Although there are not the same rigorous regulations applying to sole trader enterprises, the end-of-period reports are based on the same assumptions and prepared within the same qualitative characteristics.

The professional bodies review accepted accounting practices in the light of economic and other corporate factors. Inflation and takeovers based on **asset stripping** are two such factors. An attempt to redress these problems has resulted in a review of accepted accounting practices. All accounting practices are developmental in nature and will change over time.

In addition to the accounting standards there is a conceptual framework being developed to deal with general concepts and applications. This conceptual framework presently consists of four statements of accounting concepts (SACs), as illustrated in [10.4]. Although these statements are not currently enforceable by law, they do give guidelines upon which important financial decisions are based.

[10.4]

Statement of accounting concepts	Title
SAC 1	Definition of the reporting entity
SAC 2	Objective of general-purpose financial reporting
SAC 3	Qualitative characteristics of financial information
SAC 4	Definition and recognition of the elements of financial statements

Asset stripping is where a company buys or takes over an undervalued company and sells off all or part of its assets

Part 3 – Accrual accounting and balance-day adjustments for the complete accounting process

Already know

- Accrual accounting recognises transactions and events when the revenues are earned and expenses are incurred
- Balance-day adjustments are necessary to ensure that revenue and expense accounts are assigned to the relevant period and to update the asset and liability accounts
- Balance-day adjustments are carried out on balance-day prior to the preparation of the profit and loss summary account and end-of-period reports

Need to know

- Preparation of balance-day adjustments for inventory discrepancies, accrued expenses, prepaid expenses, accrued revenues, unearned revenues, depreciation and doubtful debts requiring calculations

Using this knowledge

- *Helps to evaluate the performance* of a business through providing information that relates to a given period of time. The matching of revenues and expenses enables management to see how the business is performing and whether there are areas for improvement. The assumptions upon which accounting is based ensure the information is reliable, relevant and able to be compared, thereby enabling the evaluation of the performance of the business over a period of time

ACCOUNTING VOCABULARY

Accrual accounting
Doubtful debts accounts

Matching principle
Provision for doubtful debts account

Learning objectives

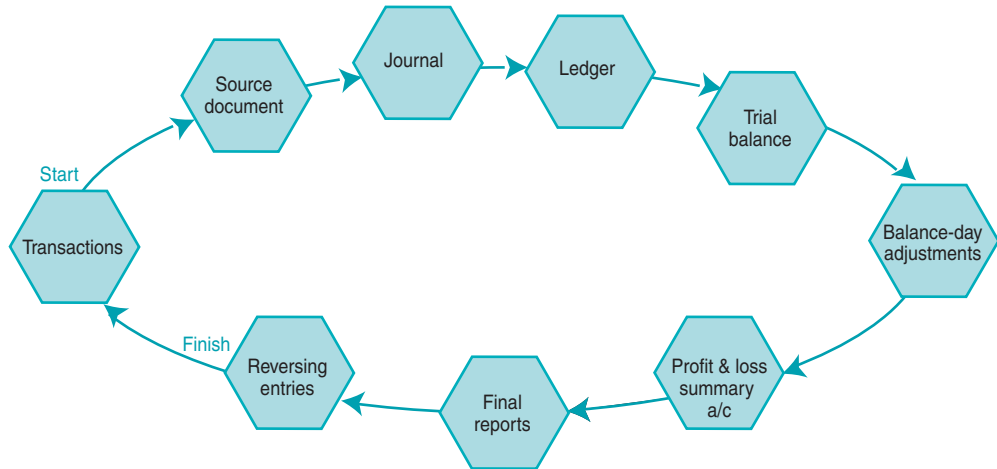
After completing this section, you should be able to:

- 1 distinguish between cash and accrual accounting
- 2 prepare general journal entries for a range of balance-day adjustments including accrued expenses and revenues, unearned revenues, prepaid expenses, inventory discrepancies, depreciation and doubtful debts
- 3 calculate the amount for the adjustments.

Accrual accounting and balance-day adjustments

Recall from chapter 2 the complete accounting process, as shown in [10.5].

[10.5]



The two common methods of accounting are cash accounting and accrual accounting.

Learning objective 1

- *Cash accounting* recognises revenue when the cash is received regardless of when the service/sale was performed/made. Similarly, expenses are recorded only when the actual cash is paid.
- *Accrual accounting* records revenue when the sale is made or the service is performed, not when the cash is received. Expenses are recorded when the business enters a contract for the goods or services, not when the cash is paid. Accrual accounting provides a more complete portrayal of operating performance and financial position. This system ensures a better matching of revenues earned and expenses incurred in a given period of time, and should show a more accurate profit figure.

Profit determined under these two methods of accounting would differ significantly. This is because the methods differ as to when they *recognise* (record) revenue and when they *realise* revenue (that is, actually receive cash).

The end-of-period financial reports are prepared from the information in the trial balance. The trial balance lists the accounts in the ledger and their balances as at a certain date. At this point, some of the revenue and expense accounts contain amounts that affect more than one accounting period.

Balance-day adjustment entries are necessary to assign revenues to the period in which they are earned and expenses to the period in which they are incurred. Adjusting entries also update the asset and liability accounts.

Review of accruals and prepayments

The four balance-day adjustments reviewed in this section are:

- | | |
|---------------------------|----------------------------|
| 1 prepaid expenses | 3 unearned revenues |
| 2 accrued expenses | 4 accrued revenues. |

Prepaid expenses

Prepaid expenses are expenses that are paid before they are incurred. Example 14 shows a balance-day adjustment involving prepaid expenses.

EXAMPLE 14

Learning objectives 2, 3

On 1 February 2010, Regina May paid rent for six months of \$1 200. The rent expense account in the ledger appears as:

Regina May General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Rent expense a/c	
Feb 1	Bank	1 200			

Regina May General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Rent expense a/c			
Feb 1	Bank	1 200		1 200 Dr

The rent expense has been paid for six months from 1 February 2010 until 31 July 2010. If the accounting period ends on 30 June 2010 and balance day is therefore 30 June 2010, any rent paid after that day has been prepaid and relates to the next accounting period.

The calendar below shows the year for 2010. The months that have been crossed out show the six months for which the rent has been paid. The shaded months indicate the relevant part of the financial year for 2010 to which the rent expense relates.

Any rent paid for in the current financial period that belongs to the next financial period must be removed from the expense account and recognised as an expense in the next accounting period.

Current financial period							Next financial period				
2010 Jan.	2010 Feb.	2010 March	2010 April	2010 May	2010 June	2010 July	2010 Aug.	2010 Sept.	2010 Oct.	2010 Nov.	2010 Dec.

Period rent paid

The financial year ends on 30 June 2010 and balance day is on 30 June 2010.

Steps in determining the prepaid expense period:



- Step 1** For how many months was the rent expense paid? 6 months (crossed area)
- Step 2** For how many months in the current financial period has the rent expense been paid? 5 months (shaded area)
- Step 3** For how many months in the next financial period has the rent expense been paid? 1 month
- Step 4** Therefore, for how many months has the rent expense been prepaid? 1 month
- Step 5** How much is the rent expense per month? \$200 (\$1 200 ÷ 6 months)
- Step 6** Therefore, how much of the rent expense has been prepaid? \$200 (\$200 x 1 month)



The rent account in the ledger has to be adjusted to show that, of the \$1 200 recorded in the account as an expense, \$200 belongs to the next accounting period and is therefore a prepaid expense. A general journal entry is necessary to effect this adjustment.

General journal (extract)

Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Prepaid expenses Rent expense (Balance-day adjustment)	Dr Cr	200	200

The posted general journal entry is shown below in bold. The ledger accounts are closed off or balanced prior to the preparation of the income statement and the balance sheet.

**Regina May
General ledger (extract) – T-format**

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Rent expense a/c					
Feb 1	Bank	1 200	June 30	Prepaid expenses	200
				Profit and loss summary	1 000
		<u>\$1 200</u>			<u>\$1 200</u>
Prepaid expenses a/c					
June 30	Rent expense	200	June 30	Balance c/d	200
		<u>\$200</u>			<u>\$200</u>
July 1	Balance b/d	200			

**Regina May
General ledger (extract) – columnar format**

Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
Rent expense a/c				
Feb 1	Bank	1 200		1 200 Dr
June 30	Prepaid expenses		200	1 000 Dr
	Profit and loss summary		1 000	0
Prepaid expenses a/c				
June 30	Rent expense	200		200 Dr

The income statement will now show rent expense of \$1 000 for the period (\$200 x 5 months).

The asset account, prepaid expenses, will show a balance of \$200 in the balance sheet, reflecting the one month for which the rent has been prepaid. It is classified as an asset because, at balance day, the amount of the prepaid rent expense is owed the business.

Review & practice 4

- a What** are prepaid expenses?
- b Why** is it necessary to make an adjustment for a prepaid expense?
- c How** much is prepaid in each of the following situations?
 - i** On 1 April 2010, T Beyonce paid the annual insurance premium of \$600 for a delivery vehicle.
 - ii** On 30 September 2009, Greta Gershwin paid \$300 for a 12-month subscription to a trade magazine.

► Exercises 10.15 to 10.19, pages 526–7

Accrued expenses

Accrued expenses are costs that have been incurred in the current financial period but not yet paid. Example 15 shows a balance-day adjustment involving an accrued expense.

EXAMPLE 15

Regina May pays her employees on a weekly basis each Friday for a five-day working week. Wages amount to \$2 000 each week. June 30 (balance day) falls on a Tuesday. The wages expense account in the ledger appears as:

Regina May General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
				Wage expense a/c	
DY	Bank	102 000			

DY = During year.

Regina May General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2009/10				
	Wage expense a/c			
DY	Bank	102 000		102 000 Dr

The wages account shows the actual amount that has been paid to employees during the financial year 2009/10. If the accounting period ends on 30 June 2010, any work completed by employees up to and including that date must be matched against that period's revenue.

The calendar below shows the last pay week in June. The shaded days indicate the relevant part of the week that belongs to the current financial year. As pay day is not until Friday, the employees have worked two days in the current financial year for which they have not been paid.



Current period		Next period		
Monday 29 June 2010	Tuesday 30 June 2010	Wednesday 1 July 2010	Thursday 2 July 2010	Friday 3 July 2010 Pay day

The financial year ends on 30 June 2010 and balance day is on 30 June 2010.
Steps in determining the accrued expense:



- Step 1** How many days have the employees worked in the current financial year? **2 days** (crossed area)
- Step 2** How much is the wage expense per day? **\$400** (\$2 000 ÷ 5 days) (shaded area)
- Step 3** Therefore, how much is owing (accrued) for the current financial year? **\$800** (\$400 x 2 days)

The wages account in the ledger has to be adjusted to show that an additional \$800 should have been paid for the current financial year. A general journal entry is necessary to effect this adjustment.

General journal (extract)

Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Wages Dr Accrued expenses Cr (Balance-day adjustment)		800	800

The posted general journal entry is shown below in bold. The ledger accounts are closed off or balanced prior to the preparation of the income statement and the balance sheet.

Regina May General ledger (extract) – T-format

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009/10			2009/10		
Wage expense a/c					
June 30	Bank	102 000	June 30	Profit and loss summary	102 800
	Accrued expenses	800			
		<u>\$102 800</u>			<u>\$102 800</u>
Accrued expense a/c					
June 30	Balance c/d	800	June 30	Wages expense	800
		<u>\$800</u>			<u>\$800</u>
			July 1	Balance b/d	800

Regina May General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Wage expense a/c			
June 30	Bank	102 000		102 000 Dr
	Accrued expenses	800		102 800 Dr
	Profit and loss summary		102 800	0
	Accrued expenses a/c			
June 30	Wages expense		800	800 Cr

The income statement will now show wages expense of \$102 800 for the period.
 The liability account, accrued expenses, will show a balance of \$800 in the balance sheet, reflecting the two days owing to employees for work completed in the previous financial period. It is classified as a liability because, at balance day, the amount of accrued wages expense is owed by the business.

Review & practice 5

- a What** are accrued expenses?
- b Why** are they classified as liabilities?
- c How** much is accrued in each of the following situations?
 - i** Weekly salaries for a six-day work week total \$3 600, payable on a Friday. This year, 30 June falls on a Wednesday.
 - ii** Interest on a loan of \$120 000 is charged on a monthly basis at the rate of 7.5% per annum. Interest for the month of June had not yet been paid as at 30 June 2010.

► Exercise 10.20, page 527

Unearned revenues

Unearned revenues are revenues for which the cash has been received before the business has earned the revenue. Example 16 shows a balance-day adjustment involving unearned revenue.

EXAMPLE 16

On 1 May 2010, Regina May received six months' commission of \$3 600 from an agency. The commission revenue account in the ledger appears as:

Regina May General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Commission revenue a/c	
			May 1	Bank	3 600

Regina May
General ledger (extract) – columnar format

Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Commission revenue a/c			
May 1	Bank		3 600	3 600 Cr

The commission received is for the next six months, from 1 May 2010 to 31 October 2010. As the accounting period ends on 30 June 2010, some of this commission received relates to the next accounting period.

The calendar year for 2010 is shown below. The months that have been crossed out show the six months for which the commission has been received. The shaded months indicate the relevant part of the financial year for 2010 to which the commission revenue relates.

Current financial period						Next financial period					
2010 Jan.	2010 Feb.	2010 March	2010 April	2010 May	2010 June	2010 July	2010 Aug.	2010 Sept.	2010 Oct.	2010 Nov.	2010 Dec.

Commission received

The financial year ends on 30 June 2010 and balance day is on 30 June 2010. Steps in determining the unearned revenues for commission:



- Step 1** For how many months was the commission revenue received? 6 months (crossed area)
- Step 2** For how many months in the current financial period has the commission revenue been received? 2 months (shaded area)
- Step 3** For how many months in the next financial period has the commission revenue been received? 4 months
- Step 4** Therefore, for how many months has the commission revenue been received in advance? 4 months
- Step 5** How much is the commission revenue per month? \$600 (\$3 600 ÷ 6 months)
- Step 6** Therefore, how much of the commission revenue is unearned? \$2 400 (\$600 x 4 months)

The commission account in the ledger has to be adjusted to show that, of the \$3 600 recorded in the account as revenue, \$2 400 belongs to the next accounting period and is therefore unearned revenue. A general journal entry is necessary to effect this adjustment.

General journal (extract)

Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Commission revenue	Dr	2 400	
	Unearned revenues	Cr		2 400
	(Balance-day adjustment)			

The posted general journal entry is shown below in bold. The ledger accounts are closed off or balanced prior to preparing the income statement and balance sheet.



Regina May General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Commission revenue a/c					
June 30	Unearned revenues	2 400	May 1	Bank	3 600
	Profit and loss summary	1 200			
		<u>\$3 600</u>			<u>\$3 600</u>
Unearned revenues a/c					
June 30	Balance c/d	2 400	June 30	Commission revenue	2 400
		<u>\$2 400</u>			<u>\$2 400</u>
			July 1	Balance b/d	2 400
Regina May General ledger (extract) – columnar format					
Date	Particulars	Debit \$	Credit \$	Balance \$	
2010					
Commission revenue a/c					
May 1	Bank		3 600	3 600	Cr
June 30	Unearned revenues	2 400		1 200	Cr
	Profit and loss summary	1 200		0	
Unearned revenues a/c					
June 30	Commission revenue		2 400	2 400	Cr

The income statement will now show commission revenue of \$1 200 for the period (\$600 x 2 months).

The liability account, unearned revenues, will show a balance of \$2 400 in the balance sheet, reflecting the four months for which the commission has been received in advance and is as yet unearned. It is classified as a liability because, at balance day, the amount of the unearned commission revenue is owed by the business.

Review & practice 6

- What are unearned revenues?
- When are unearned revenues recorded?
- Where would unearned revenues appear in the final reports?
- Why are they classified as liabilities?
- Rent is received one month in advance. The rent account shows rent received from 1 July 2009 to 30 June 2010 amounted to \$6 500. How much of this is unearned?

Accrued revenues

Learning objectives 2, 3 Accrued revenues are revenues that have been earned in the current financial period but not yet received. Example 17 shows a balance-day adjustment involving an accrued revenue.

EXAMPLE 17

On 30 June 2010, the interest revenue account showed a total of \$1 375. Interest for the month of June had not yet been received. Regina May had \$30 000 invested at an interest rate of 5% per annum. The interest revenue account in the ledger appears as:

Regina May General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Interest revenue a/c	
			DY	Bank	1 375

Regina May General ledger (extract) – columnar format				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
	Interest revenue a/c			
DY	Bank		1 375	1 375 Cr

The interest revenue account shows the total amount received during the current year. If the accounting period ends on 30 June 2010 and balance day is therefore 30 June 2010, any interest revenue earned up to and including that date must include any interest not yet received.

Based on the information above, interest is owing for one month only (June). To calculate the accrued interest for the month:

- 1 Find the annual amount of interest

$$\text{\$30 000} \times 5\% = \text{\$1 500}$$

- 2 Find the monthly amount of interest owing:

$$1\,500 \div 12 = \text{\$125}$$

The interest revenue account in the ledger has to be adjusted to show that an additional \$125 should have been received for the year ended 30 June 2010. A general journal entry is necessary to effect this adjustment.

General journal (extract)				
Date	Particulars	Post ref	Debit \$	Credit \$
2010				
June 30	Accrued revenues	Dr	125	
	Interest revenue	Cr		125
	(Balance-day adjustment)			

The posted general journal entry is shown below in bold. The ledger accounts are closed off or balanced prior to the preparation of the income statement and balance sheet.



Regina May General ledger (extract) – T-format					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Interest revenue a/c					
June 30	Profit and loss summary	1 500	DY	Bank	1 375
		<u>1 500</u>	June 30	Accrued revenues	<u>125</u>
					<u>\$1 500</u>
Accrued revenues a/c					
June 30	Interest revenue	<u>125</u>	June 30	Balance c/d	<u>125</u>
		<u>\$125</u>			<u>\$125</u>
July 1	Balance b/d	125			
Regina May General ledger (extract) – columnar format					
Date	Particulars	Debit \$	Credit \$	Balance \$	
2010					
Interest revenue a/c					
DY	Bank		1 375	1 375	Cr
	Accrued revenues		125	1 500	Cr
June 30	Profit and loss summary	1 500		0	
Accrued revenues a/c					
June 30	Interest revenue	125		125	Dr

The income statement will now show interest revenue of \$1 500 for the period.

The asset account, accrued revenue, will show a balance of \$125 in the balance sheet, reflecting the one month for which the interest is accrued. It is classified as an asset because, at balance day, the amount of the accrued interest revenue is owed to the business.

Review & practice

7

- a What** are accrued revenues?
- b Why** are they classified as assets?
- c How much** is accrued in the following situations?
 - i** Interest on government bonds is owing for the month of June. The business has \$60 000 invested at an interest rate of 7% per annum.
 - ii** Commission is earned on the sales of a product. The supplier pays commission of 2.5% per month based on cash sales. Commission is received in the month following the sale. Cash sales for June amounted to \$18 000.

Other balance-day adjustments

Learning objectives 2, 3 Apart from prepaid, unearned and accrued revenues and expenses, the other areas of the business that do not fall neatly into one accounting period include:

- inventory discrepancies
- depreciation
- doubtful debts.

Inventory discrepancies

Refer to chapter 5
for more on inventory
losses.

As covered in chapter 5, in a perpetual inventory system a business always knows how much stock should be on hand. Even so, it is necessary for the business to undertake a physical stocktake regularly (annually) to determine whether actual stock equals recorded stock.

Quite often the stocktake will reveal differences between the recorded amount of stock on the inventory record and the actual physical quantity of stock. When a discrepancy occurs, a balance-day adjustment is created to increase or decrease the inventory account so that the inventory record matches the quantity of stock on hand. The most common adjustment necessary is when actual stock is less than recorded stock. This results in a shortage. When a shortage is discovered, a new expense account called 'Inventory shortage expense' is created. The amount debited to this account is determined by multiplying the number of units short by the cost price of each unit. The total amount is credited to the inventory account because the asset has decreased in value.

Inventory losses need to be monitored more closely than inventory surpluses. The causes of large discrepancies in inventory need to be determined and minimised.

EXAMPLE 18

Ashgrove Physiotherapy holds a small amount of stock such as bandages, cream and splints. The stock records are shown below:

Bandages on hand 100	Unit cost \$6	Total value \$600	Cream on hand 17 tubes	Unit cost \$10	Total value \$170	Splints on hand 6	Unit cost \$50	Total value \$300
-------------------------------------	------------------------------	----------------------------------	---------------------------------------	-------------------------------	----------------------------------	----------------------------------	-------------------------------	----------------------------------

A stocktake on 30 June reveals that there are 95 bandages, 15 tubes of cream and 5 splints in the shop and storeroom. In order to determine the inventory discrepancy and record the balance-day adjustment, the first step is to determine the cost of the missing inventory.

Item	Number recorded	Number counted	Number missing	Cost of missing items \$
Bandages	100	95	5	30
Cream	17	15	2	20
Splints	6	5	1	50
				<u>100</u>

The general journal entry necessary to record the \$100 missing inventory is as follows:

**Ashgrove Physiotherapy
General journal (extract)**

Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Inventory shortage expense Inventories control (Balance-day adjustment)	Dr Cr	100	100

The journal entry is then posted to the ledger as follows:

**Ashgrove Physiotherapy
General ledger (extract) – T-format**

Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Inventories control a/c					
June 30	Balance	1 070	June 30	Inventory shortage expense	100
Inventory shortage expense a/c					
June 30	Inventories control	100			

**Ashgrove Physiotherapy
General ledger (extract) – columnar format**

Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
Inventories control a/c				
June 30	Balance	1 070		1 070 Dr
	Inventory shortage expense		100	970 Dr
Inventory shortage expense a/c				
June 30	Inventories control	100		100 Dr

The inventory shortage expense account is usually included as part of the cost of goods sold in the income statement. An alternative treatment is to record inventory adjustment as a selling expense.

Review & practice 8

- Why is there often a discrepancy between counted stock and the recorded stock figure?
- How would the following appear in the journals and ledger accounts of Susan's Discount Shop on 30 June 2010?

Item	Recorded stock	Stocktake amount	Price per item
Stockings	552	548	\$1.50
Sunglasses	76	69	\$5.00
Chewing gum	1 200	1 100	\$0.20

Depreciation of non-current assets

As was discussed in chapter 6, depreciation is the means by which the cost of a non-current asset is spread over the life of that asset. Most non-current assets decline in usefulness as they age. Because the assets are used by the business to help earn revenue for a number of years, part of the original cost of the asset is matched against the revenue earned in each financial year of the asset's useful life. This charge of depreciation against revenues earned is recorded on balance day and adheres to the matching principle.

EXAMPLE 19

An extract from the trial balance of Wendy Astbury is shown below.

Wendy Astbury Trial balance (extract) as at 30 June 2010		
Account	Debit \$	Credit \$
Motor vehicle	40 000	
Accumulated depreciation – motor vehicle		5 000
Equipment	20 000	
Accumulated depreciation – equipment		3 000
Office furniture	2 000	
Accumulated depreciation – office furniture		200

Wendy depreciates the non-current assets as follows:

Motor vehicle	15% p.a. reducing balance
Equipment	25% p.a. reducing balance
Office furniture	10% p.a. straight line



Summary of steps

Step 1 Calculate the amount of depreciation for each asset.

Step 2 Prepare the general journal entries to record the balance-day adjustments.

Step 3 Adjust the trial balance figures.

Step 1



Calculate the amount of depreciation for each asset.

a Reducing balance

Depreciation per annum = (Original cost of asset – Accumulated depreciation) x Depreciation rate

$$\begin{aligned}\text{Motor vehicle depreciation per annum} &= (\$40\,000 - 5\,000) \times 15\% \\ &= \$35\,000 \times 0.15 \\ &= \$5\,250\end{aligned}$$

$$\begin{aligned}\text{Equipment depreciation per annum} &= (\$20\,000 - 3\,000) \times 25\% \\ &= \$17\,000 \times 0.25 \\ &= \$4\,250\end{aligned}$$

b Straight line

Depreciation = (Original cost of asset – Residual value) x Depreciation rate

$$\begin{aligned}\text{Office furniture depreciation per annum} &= \$2\,000^1 \times 10\% \\ &= \$2\,000 \times 0.10 \\ &= \$200\end{aligned}$$

¹ There is no residual value, so the original cost remains intact.



Step 2



Prepare the general journal entries to record the balance-day adjustments.

Learning objectives 2, 3

Wendy Astbury General journal (extract)				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Depreciation on motor vehicle	Dr	5 250	
	Accumulated depreciation – motor vehicle	Cr		5 250
	(Balance-day adjustment)			
	Depreciation on equipment	Dr	4 250	
	Accumulated depreciation – equipment	Cr		4 250
	(Balance-day adjustment)			
	Depreciation on office furniture	Dr	200	
	Accumulated depreciation – office furniture	Cr		200
	(Balance-day adjustment)			

Step 3



Adjust the trial balance figures and add any additional accounts.

Wendy Astbury Trial balance (extract) as at 30 June 2010		
Account	Debit \$	Credit \$
Motor vehicle	40 000	
Accumulated depreciation – motor vehicle		10 250 5 000
Equipment	20 000	
Accumulated depreciation – equipment		7 250 3 000
Office furniture	2 000	
Accumulated depreciation – office furniture		400 200
Additional accounts		
Depreciation – motor vehicle	5 250	
Depreciation – equipment	4 250	
Depreciation – office furniture	200	

Review & practice

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- a How much** depreciation would be written off each of the following assets?
- The delivery vehicle account had a balance of \$60 000. The balance of the accumulated depreciation account is \$17 000. A 17.5% per annum reducing balance depreciation rate is used. The vehicle had an estimated useful life of five years with a residual value of \$10 000.
 - The furniture account was valued at \$3 400. The accumulated depreciation account showed a balance of \$600. The furniture's useful life is estimated to be 10 years with a residual value of \$300. The straight line method is used.
- b How** would the information in **a** appear in a trial balance extract?

Doubtful debts

As discussed in chapter 4, a bad debt is an account receivable's outstanding balance which it is deemed will not be received. The bad debts account in the ledger shows the total amount of actual bad debts written off during an entire financial period.

In accrual accounting, the matching principle requires that the bad debt expense is recorded in the same accounting period as the revenue earned from the credit sales to which the debts relate. An estimate is made of the amount of accounts receivable balances from the current accounting period that may not be collected. These may become bad debts – that is, they are *doubtful debts*.

The **doubtful debts account** is created to record the estimated amount of bad debts arising from the current accounting period. The name of this account indicates that the figure in it reflects debts that the business does not think will be collected.



The **doubtful debts account** records debts that are unlikely to be collected. It ensures that the matching principle is applied to the current accounting period.

The doubtful debts account is an expense account for the business and consequently is shown in the income statement as a finance expense. This account has the effect of reducing the profit recorded by a business.

In order to comply with the double-entry principle, a *provision for doubtful debts account* is created. This account reduces the value of the accounts receivable figure by reflecting doubtful debts for the current accounting period.



The **provision for doubtful debts account** records debts that are unlikely to be collected. As a negative asset account, it has the effect of reducing the accounts receivable value in the balance sheet.

EXAMPLE 20

The trial balance of Chris Owens is shown below.

Chris Owens
Trial balance (extract) as at 30 June 2010

Account	Debit \$	Credit \$
Bad debts	880	
Accounts receivable control	23 000	
Provision for doubtful debts		700

Additional information as at 30 June 2010:

Chris Owens requires the provision account to be 5% of the balance of the accounts receivable control account.

From the above information, it can be seen that the business has written off bad debts during the year to the total amount of \$880. The existence of a provision for doubtful debts account (\$700) indicates that, at the end of the previous financial year, the business anticipated that a proportion of the accounts receivable balances would not be received. Therefore, in the period ending 30 June 2009, the expense of \$700 doubtful debts was matched against that period's revenue. Although the bad debts were \$880, \$700 belongs to the previous accounting period as per the provision made. This amount is therefore transferred to the provision for doubtful debts account. The remainder of the bad debts account of \$180 is closed off and will appear in the current financial period's income statement as a finance expense. The general journal entries required to record this are as follows:



$$\$1\,150 = 5\% \times \$23\,000$$

Chris Owens General journal (extract)				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Provision for doubtful debts	Dr	700	
	Bad debts	Cr		700
	(Transfer bad debts to provision)			
	Doubtful debts	Dr	1 150	
	Provision for doubtful debts	Cr		1 150
	(Balance-day adjustment)			

The trial balance figures would be adjusted as shown below.

Chris Owens Trial balance (extract) as at 30 June 2010		
Account	Debit \$	Credit \$
Bad debts	180 880	
Accounts receivable control	23 000	
Provision for doubtful debts		1 150 700
Additional accounts		
Doubtful debts	1 150	

The provision for doubtful debts shows the effect of the two general journal entries. The figures in bold represent the amounts that will appear in the final reports for those accounts.



Summary of steps

- Step 1** Transfer the bad debts to the provision for doubtful debts account via a general journal entry (only up to the amount of the provision).
- Step 2** Calculate the balance required for the new provision for doubtful debts account based on current values of accounts receivable.
- Step 3** Prepare the general journal entry to record the new provision for doubtful debts amount.
- Step 4** Adjust the trial balance figures.



EXAMPLE 21**Alternative treatment – Direct write-off to provision account**

On 1 July 2009, Chris Owens had a balance in the provision for doubtful debts account of \$700, and \$19 000 in the accounts receivable account. During the year, bad debts of \$880 were written off. The general journal entry to record the bad debts is:

Chris Owens General journal (extract)				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
During year	Provision for doubtful debts	Dr	800	
	GST clearing	Dr	80	
	Accounts receivable	Cr		880
	(Bad debts written off)			

At 30 June 2010, the trial balance extract showed the following balances:

Chris Owens Trial balance (extract) as at 30 June 2010		
Account	Debit \$	Credit \$
Accounts receivable control	23 000	
Provision for doubtful debts	100	

The provision for doubtful debts account now has a debit balance because \$800 in bad debts was written off during the financial year ended 30 June 2010 and only \$700 was provided for doubtful debts at the beginning of the period.

At 30 June 2010, Chris Owens requires the provision account to be 5% of the balance of the accounts receivable control account. The desired balance of the provision account is therefore:

$$\text{\$23 000} \times 5\% = \text{\$1 150}$$

As the provision account now has a debit balance, it is necessary to increase the provision account by \$1 250 (1 150 + 100) to cover the shortfall of \$100 from the current year's bad debts. This would appear in the general journal as follows:

Chris Owens General journal (extract)				
Date 2010	Particulars	Post ref	Debit \$	Credit \$
June 30	Doubtful debts	Dr	1 250	
	Provision for doubtful debts	Cr		1 250
	(Estimate of bad debts)			

The trial balance figures would be adjusted as shown below. The figures in bold represent the amounts that will appear in the final reports for those accounts.

Chris Owens Trial balance (extract) as at 30 June 2010		
Account	Debit \$	Credit \$
Accounts receivable control	23 000	
Provision for doubtful debts	100	1 150
Additional accounts		
Doubtful debts	1 250	

$$\begin{aligned} 100 \text{ Dr} + 1\,250 \text{ Cr} \\ = 1\,150 \text{ Cr} \end{aligned}$$

Review & practice 10

- a **What** is meant by the term 'doubtful debts'?
- b **Why** do businesses provide for doubtful debts?
- c **Where** does the provision for doubtful debts account appear in the final reports? **Why**?
- d **What** general journal entries would be necessary to record the information in each of the following situations? How much would appear in the final reports for the following accounts?
 - bad debts
 - doubtful debts
 - provision for doubtful debts.
- i On 30 June 2010, the accounts receivable control account had a balance of \$45 000. The provision for doubtful debts account showed a balance of \$1 500. During the financial year ending 30 June 2010, \$1 900 was written off as bad debts. The desired provision is 5% of the accounts receivable control account.
- ii On 30 June 2010, the accounts receivable control account had a balance of \$19 000. The provision for doubtful debts account showed a balance of \$600. During the financial year ending 30 June 2010, \$550 was written off as bad debts. The desired provision is 7% of the accounts receivable control account.

Part 4 – Presenting and classifying end-of-year reports

Already know

- An income statement reports the profit/loss of a business for a given period of time
- A balance sheet shows the assets, liabilities and owner's equity accounts as at a particular point in time
- Accrual accounting recognises transactions and events when the revenues are earned and expenses are incurred

Need to know

- Classification and presentation of income statement
- Classification and presentation of balance sheet
- Preparation of a range of balance-day adjustments requiring calculations

Using this knowledge

- *Helps to evaluate the performance of a business* through providing information that relates to specific areas of the business, and as such gives greater clarity as to where profit is generated and what areas require improvement
- Classification of reports provides a greater level of detail of financial information which *assists in decision-making* in specific areas of the business

ACCOUNTING VOCABULARY

Administrative expenses
Current assets
Current liabilities
Finance expenses
Intangibles
Investments

Non-current assets
Non-current liabilities
Ordinary expenses
Ordinary revenue
Selling expenses
Working capital

Learning objectives

After completing this section, you should be able to:

- 1 explain the basis for classification in the income statement
- 2 explain the basis for classification in the balance sheet
- 3 classify revenue and expenses
- 4 classify assets and liabilities
- 5 prepare fully classified end-of-period reports incorporating balance-day adjustments.

End-of-year reports

Learning objectives 1, 2 In the income statement, revenues and expenses can be classified to further explain their relationship to the profit (loss) generated by the business. In the balance sheet, assets and liabilities are classified to add clarity to the report. The presentation and classification of end-of-year reports is designed to make the reports more:

- readable
- understandable
- informative
- comparable.

This further fulfils the objectives of accounting in providing information for decision-making and performance evaluation.



Classified income statement

Learning objective 3 Recall from chapter 2 that the income statement is a report which restates the information in the profit and loss summary account and is prepared at the end of the accounting period. To date, items have been only broadly categorised as either revenue or expense, as shown in examples 22 and 23.

EXAMPLE 22

Service enterprise showing net profit

Luen Robbins Income statement for the year ended 30 June 2010

	\$	\$
Service fees	265 000	
Interest revenue	3 500	
Commission revenue	1 500	270 000
Less Expenses		
Supplies expenses	100 000	
Advertising	25 000	
Bank charges	2 000	
Telephone	1 000	
Rent expense	15 000	
Wages	25 000	168 000
NET PROFIT		\$102 000

EXAMPLE 23**Trading enterprise showing gross profit**

Maeve O'Callaghan
Income statement
for the year ended 30 June 2010

	\$	\$
Sales	315 000	
Less Sales returns	<u>16 000</u>	299 000
Less Cost of goods sold		<u>183 000</u>
GROSS PROFIT		116 000
Add Other revenues from ordinary activities		
Interest revenue	3 500	
Commission revenue	<u>1 200</u>	<u>4 700</u>
		120 700
Less Other expenses from ordinary activities		
Salaries – sales personnel	10 000	
Repairs and maintenance	1 000	
Depreciation – delivery vehicle	2 000	
Wrapping paper	500	
Delivery vehicle expenses	2 500	
Legal costs (lawsuit)	15 000	
Credit/debit card fees	1 000	
Postage expense	2 000	
Bank charges	200	
Advertising	15 000	
Rent expense	12 000	
Wages	<u>40 000</u>	<u>101 200</u>
NET PROFIT		<u>\$19 500</u>

Ordinary activities are operations of a kind carried on regularly from reporting period to reporting period to achieve the objectives of the entity.
 [AAS1:10]

In order to clearly show how revenues were earned and where expenses were incurred, an income statement can be further classified. This is designed to enhance the report's understandability and comparability (between reporting periods), and to aid in its interpretation.

The criteria used for the classification of revenue and expense items will depend on the type of business. Revenues and expenses can be classified as either ordinary or other ordinary. Generally, other ordinary expenses can be further classified as selling and distribution expenses, general and administrative expenses, and finance expenses. Descriptions of account classifications and examples of account types are shown in [10.6]. This classification can be used for the preparation of all income statements.

The income statement simply rearranges the figures from the profit and loss summary account. The sales figure less any sales returns and allowances (or service fees) always appears first in the income statement because it is the main source of operating revenue for a business.

There are many different formats for the income statement, just as there are different formats for journals and ledgers. The narrative style is one common format.

[10.6]

REVENUES		
Revenue classification	Descriptions	Account examples
1 Ordinary	Revenue earned through the ordinary activities of the business from its principal day-to-day business transactions	<ul style="list-style-type: none"> • Sales • (Sales returns – negative revenue) • Service revenue
2 Other ordinary	Revenue earned through the ordinary activities of the business from other day-to-day business transactions, excluding sales and service revenue	<ul style="list-style-type: none"> • Commission revenue • Interest revenue • Rent revenue • Revenue from legal action
EXPENSES		
Expenses classification	Descriptions	Account examples
1 Ordinary	<p>Expenses incurred during the ordinary activities of the business from its common day-to-day business transactions</p> <p>Expenses associated with converting inventory into a saleable condition</p>	<ul style="list-style-type: none"> • Cost of goods sold • Inventory adjustment
2 Other ordinary	Expenses incurred during the ordinary activities of the business from other day-to-day business transactions not including the cost of goods sold expenses	
<ul style="list-style-type: none"> • Selling and distribution 	Expenses associated with the actual selling and distribution of inventories	<ul style="list-style-type: none"> • Advertising • Cartage outwards (delivery expenses) • Commission on sales • Delivery vehicle expenses (petrol, oil, repairs, registration, insurance on delivery vehicles) • Depreciation on delivery vehicles • Salaries – sales personnel • Showroom expenses • Wages – sales personnel
<ul style="list-style-type: none"> • General and administrative 	Expenses associated with managing the business and office	<ul style="list-style-type: none"> • Computer expenses • Electricity • Insurance (buildings) • Motor vehicle expenses • Rates and taxes • Rent expense • Repairs and maintenance • Salaries – office personnel • Stationery and printing • Telephone • Wages – office personnel
<ul style="list-style-type: none"> • Finance 	Expenses associated with collecting cash or financing the business's activities	<ul style="list-style-type: none"> • Bad debts • Bank charges • Credit/debit card fees • Interest expense (loans, mortgage, overdraft, interest charged on overdue invoices)

Learning objective 5

EXAMPLE 24**Fully classified income statement for a service business**

Luen Robbins		
Income statement for the year ended 30 June 2010		
	\$	\$
Service fees		265 000
Less Cost of services		
Supplies expenses		100 000
GROSS PROFIT		165 000
Add Other revenues from ordinary activities		
Interest revenue	3 500	
Commission revenue	1 500	5 000
		170 000
Less Other expenses from ordinary activities		
<i>SELLING AND DISTRIBUTION</i>		
Advertising	25 000	
<i>GENERAL AND ADMINISTRATIVE</i>		
Telephone	1 000	
Rent expense	15 000	
Wages	25 000	41 000
<i>FINANCE</i>		
Bank charges	2 000	68 000
NET PROFIT		\$102 000

EXAMPLE 25**Fully classified income statement for a trading business**

Maeve O'Callaghan		
Income statement for the year ended 30 June 2010		
	\$	\$
Sales	315 000	
Less Sales returns	16 000	299 000
Less Cost of goods sold		183 000
GROSS PROFIT		116 000
Add Other revenues from ordinary activities		
Interest revenue	3 500	
Commission revenue	1 200	4 700
		120 700
Less Other expenses from ordinary activities		
<i>SELLING AND DISTRIBUTION</i>		
Advertising	15 000	
Salaries – sales personnel	10 000	
Depreciation – delivery vehicle	2 000	
Wrapping paper	500	
Delivery vehicle expenses	2 500	30 000
<i>GENERAL AND ADMINISTRATIVE</i>		
Legal costs	15 000	
Postage expense	2 000	
Repairs and maintenance	1 000	
Rent expense	12 000	
Wages	40 000	70 000
<i>FINANCE</i>		
Bank charges	200	
Credit/debit card fees	1 000	
	1 200	101 200
NET PROFIT		\$19 500

Classified balance sheet

Learning objective 4

The balance sheet shows the balances of all asset, liability and owner's equity accounts at a particular point in time. It is fully classified in order to give the maximum amount of information to interested parties and assist in the analysis of the figures. The classification of balance sheet items is usually based on time; assets and liabilities are classified as either 'current' or 'non-current'.

The generally accepted definition of current assets and current liabilities is items that are likely to be converted into cash during the next accounting period (usually one year). Therefore, non-current assets and non-current liabilities are items that are likely to remain in their present form and not be converted to cash during the next accounting period.

In this chapter, non-current assets are further subdivided into categories such as 'property, plant and equipment', 'investments' and 'intangible' assets.

To date in this text, accounts have only been broadly categorised as assets, liabilities and owner's equity, as shown in example 26.

EXAMPLE 26

Broadly categorised balance sheet

Maeve O'Callaghan Balance sheet as at 30 June 2010

	\$	\$	\$
Assets			
Bank		25 000	
Accounts receivable control	18 050		
Less Provision for doubtful debts	600	17 450	
Inventory control		14 400	
Accrued revenue		1 000	
Furniture	17 900		
Less Accumulated depreciation – furniture	2 000	15 900	
Shares		3 000	
Patents		5 000	
Buildings	140 000		
Less Accumulated depreciation – buildings	5 000	135 000	216 750
Less Liabilities			
Accounts payable control		12 600	
GST clearing		5 050	
Accrued expenses		500	
Unearned revenue		500	
Mortgage on buildings		90 000	108 650
NET ASSETS			\$108 100
Represented by owner's equity			
Capital	90 600		
Add Net profit	19 500	110 100	
Less Drawings		2 000	\$108 100

The unclassified report only shows order of liquidity – that is, those assets that are in a cash format or easily converted to cash are listed first.

The same information would be presented in a fully classified balance sheet in narrative style as shown in example 27 on page 523.

Working capital is an indicator of whether an enterprise can meet its short-term financial commitments such as accounts payable. The classification of items for the balance sheet appears in [10.7].



Working capital is the total of all current assets less the total of all current liabilities.

As with the income statement, there are several different formats in which the balance sheet can be presented. The format used throughout this chapter is the narrative form showing working capital.

[10.7]

OWNER'S EQUITY		
Owner's equity classification	Descriptions	Figures shown
Capital	The investment the owner has in the business. Capital is shown as <i>owner's equity</i> for sole traders and partnerships, and as <i>shareholders' equity</i> for companies	<ul style="list-style-type: none"> • Capital (opening balance, profit (loss)) • (Drawings)
ASSETS		
Assets classification	Descriptions	Figures shown
1 Current	Assets that are already cash or are likely to be converted into cash during the next accounting period	<ul style="list-style-type: none"> • Petty cash • Bank • Accounts receivable • (Provision for doubtful debts) • Inventory control • Accrued revenue • Prepaid expenses
2 Non-current	Assets that are used to earn revenue or income but are not bought and sold as part of a business's ordinary day-to-day activities. Non-current assets are listed in order of liquidity in the balance sheet	
• Property, plant and equipment	Physical items owned by a business	<ul style="list-style-type: none"> • Furniture • (Accumulated depreciation) • Vehicles • Equipment • Buildings • Land
• Investments	Funds invested by the business in other enterprises	<ul style="list-style-type: none"> • Bonds • Debentures • Loans • Shares
• Intangibles	Assets that have no physical substance	<ul style="list-style-type: none"> • Copyright • Goodwill • Patents
LIABILITIES		
Liabilities classification	Descriptions	Figures shown
1 Current	Short-term debts that will be repaid within the next accounting period	<ul style="list-style-type: none"> • Accounts payable • GST clearing • Bank overdraft • Accrued expenses • Unearned revenues
2 Non-current	Debts that will not be repaid within the next accounting period	<ul style="list-style-type: none"> • Loans (long-term) • Mortgages

EXAMPLE 27

Learning objective 5

Balance sheet – fully classified narrative style**Maeve O'Callaghan****Balance sheet as at 30 June 2010**

	\$	\$	\$	\$
Current assets				
Bank		25 000		
Accounts receivable control*	18 050			
Less Provision for doubtful debts	<u>600</u>	<u>17 450</u>		
Inventory control		14 400		
Accrued revenue		1 000	57 850	
Less Current liabilities				
Accounts payable control*		12 600		
GST clearing		<u>5 050</u>	<u>18 650</u>	
Accrued expenses		500		
Unearned revenues		500		
WORKING CAPITAL			39 200	
Add Non-current assets				
<i>Property, plant and equipment</i>				
Furniture	17 900			
Less Accumulated depreciation – furniture	<u>2 000</u>	15 900		
Buildings	140 000			
Less Accumulated depreciation – buildings	<u>5 000</u>	<u>135 000</u>	150 900	
<i>Investments</i>				
Shares			3 000	
<i>Intangibles</i>				
Patents			<u>5 000</u>	198 100
Less Non-current liabilities				
Mortgage on buildings				<u>90 000</u>
NET ASSETS				<u>\$108 100</u>
Represented by owner's equity				
Capital		90 600		
Add Net profit		<u>19 500</u>	110 100	
Less Drawings			<u>2 000</u>	<u>\$108 100</u>

* Some businesses list the individual names of accounts receivable and accounts payable and the amounts owed. Either method is an acceptable accounting practice.

Review & practice 11

- What** is the basis for classification of the balance sheet?
- Why** are final reports classified?
- Who** would be interested in the information contained in the final reports?
- How** would the following accounts be classified in the final reports? (Assume the financial period ends 30 June 2010.)
 - Bank overdraft
 - Patents
 - Accounts payable
 - Loan from NAZ Bank (due October 2010)
 - Government bonds
 - Depreciation on delivery van
 - Advertising
 - Office wages
 - Depreciation on furniture
 - Accumulated depreciation – buildings
 - Land
 - Accrued expenses
 - Unearned revenue
 - Provision for doubtful debts



- Bank
- Goodwill
- Shares in MIM
- Commission expense
- Rent revenue
- Bad debts
- Bank charges
- Interest on investment
- Mortgage on land
- Interest on mortgage

► Exercises 10.38 to 10.49, pages 531–40

Understandings

- Accounting assumptions underlie the complete accounting process.
- Cash accounting is a method of accounting in which the effects of transactions are recognised when cash is received or paid out.
- Accrual accounting is a method of accounting that recognises transactions and events when the revenue is earned and expenses are incurred.
- Balance-day adjustments are entries made at balance day in order to match the revenues and expenses accurately so that profit can be determined.
- In the income statement, expenses from ordinary activities can be classified as cost of goods sold, selling and distribution expenses, general and administrative expenses, and finance expenses.
- In the balance sheet, assets can be classified into current and non-current assets. Non-current assets can be further classified into property, plant and equipment; investments; and intangible assets. Liabilities can be classified into current and non-current liabilities.
- Financial reports are based on assumptions and certain qualitative characteristics. When reading an accounting report, the user must be aware that the report is prepared in accordance with these assumptions and characteristics.

► Exercises 10.50 and 10.51 (decision-making), pages 540–1

Exercises

★ 10.1 Accounting assumptions



Define the term 'assumption'.

★ 10.2 Accounting assumptions



- a** List the accounting assumptions.
- b** Define each of the assumptions in your own words.

★ 10.3 Accounting entity assumption



Illustrate the use of the accounting entity assumption in a business.

★ 10.4 Historical cost assumption



Explain objectivity versus subjectivity in relation to the historical cost assumption.

★ 10.5 Assumptions



Explain the purpose of each of the following accounting assumptions.

- a** Accounting period assumption
- b** Monetary assumption
- c** Continuity assumption.

★ 10.6 Assumptions



Develop a mind map that illustrates the five accounting assumptions.

★ 10.7 Assumptions



Complete a summary table of the five accounting assumptions using the following headings:

Assumption	Description	Purpose	Example
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★★ 10.8 Assumptions

In each of the following independent situations, list the accounting assumptions that apply:

- a** A car dealer's business has an accounting period ending 30 June 2010. On 2 July 2010, a fire destroys its largest outlet, resulting in an anticipated loss of \$1 million for the following financial year. Despite this anticipated loss, the business will continue to operate. The details regarding this expense were revealed as a note to the accounting reports ending 30 June 2010.
- b** A computer network was sold with a guarantee covering parts and labour for the next two years. A provision was created in the account to match the expected future cost relating to this guarantee.
- c** Jane Farrow is a lawyer. Her practice has been very successful, so she has been able to purchase an investment portfolio of shares and securities with some of her earnings from the practice. The accounting records for Jane's law practice do not include this investment portfolio.
- d** Jack Kendall's enterprise acquired a new computerised accounting system valued at \$500 000. This was recorded in the financial records of the enterprise.
- e** Sibyl felt that her accounting reports should reflect the impact of the economy. She has been advised by her accountant that this is not necessary and that all items should be valued at their purchase price.

★★ 10.9 Assumptions



Due to ill health, John Kahn will reduce staffing levels and the scale of operations in the next financial year, from 12 outlets to the two outlets that operate from his home town. These have been the only outlets making a profit over the last two years.

You have been asked by John Kahn whether any changes resulting from the application of the accounting assumptions need to be considered under these circumstances. Write two paragraphs on this issue in the following format:

- a** Describe any assumption that is relevant to the issue.
- b** Give your opinion on why and how it is applicable to this enterprise.

★ 10.10 Qualitative characteristics



- a List the five qualitative characteristics of accounting reports.
- b Explain each of the qualitative characteristics.

★ 10.11 Qualitative characteristics



Develop a mind map that illustrates the qualitative characteristics of accounting reports.

★ 10.12 Assumptions and qualitative characteristics



State the assumptions or qualitative characteristics that apply to each of the situations below. Each situation is to be treated independently.

- a All costs and expenses are aligned with the relevant income that relates to those transactions.
- b The financial data has been assessed as being free from undue error.
- c All financial data produced in the reports has been rounded to the nearest thousand dollars.
- d There is concern over the changing value of money.
- e The private records of the owner are kept separate from the business's records.
- f The information available to the users will take six months to absorb and analyse.
- g The users of the financial data were unable to decipher the information.
- h It was felt that the inclusion of some detailed information was unnecessary.
- i All information collected is based on the price at which the goods were purchased.
- j Some information available did not assist with decision-making.

★★ 10.13 Assumptions and qualitative characteristics



Allan Cheshire, a new client, has come to you for advice regarding accounting information. He has heard that accounting information should be prepared in accordance with accounting assumptions and qualitative characteristics if it is to fulfil its main objectives.

In report format, explain to Allan how each of the assumptions and qualitative characteristics assist in this function.

★★ 10.14 Assumptions and qualitative characteristics



Cathy Lam stated in a memo that all financial reports relating to the financial year ending 30 June 2010 are to be completed by 20 July 2010, as an important meeting involving the firm's financial lenders is scheduled for 25 July 2010. Although this is a tight schedule, the reports are required because the granting of an export contract will depend on the outcome of this meeting. The accountant has advised Cathy that this would be an impossible task as the exact value of some financial data will not be known until some time between 24 and 26 July 2010. Write three paragraphs on this conflict in the following format:

- a State the issue in your own words.
- b Inform the reader of the underlying principles involved.
- c State your opinion on the issues.

★ 10.15 Accrual accounting



Explain, in your own words, the accrual system of accounting.

★ 10.16 Balance-day adjustments



List and describe the adjusting entries that may be necessary on balance day under the accrual accounting system.

★ 10.17 Balance-day adjustments



Develop a mind map that illustrates balance-day adjustments.

★ 10.18 Balance-day adjustments



Complete a summary table of the balance-day adjustments using the following headings:

Type of adjustment	Description	Example	General journal entry
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★★ 10.19 Prepaid expenses

For each of the separate scenarios below:

- i** show the general journal entries necessary for the following balance-day adjustments
 - ii** state how much would appear in the income statement for the year ended 30 June 2010 for each expense item
 - iii** state how much would appear in the balance sheet as at 30 June 2010 for prepaid expenses.
- a** Council rates of \$1 200 for three months were paid on 1 May 2010. The rates account (before adjustments) showed a balance of \$5 200.
 - b** Rent of \$1 600 for two months is paid on 1 June 2010. The rent account (before adjustments) showed a balance of \$10 400.
 - c** Four months' advertising totalling \$860 is paid on 1 April 2010. The advertising account (before adjustments) showed a balance of \$2 400.
 - d** Quarterly rental of \$120 for the telephone is paid on 1 May 2010. The telephone account (before adjustments) showed a balance of \$1 600.
 - e** Insurance on delivery vehicle of \$2 400 is paid for a 12-month period on 1 February 2010.

★★ 10.20 Accrued expenses

For each of the separate scenarios below:

- i** show the general journal entries necessary for the following balance-day adjustments
 - ii** state how much would appear in the income statement for the year ended 30 June 2010 for each expense item
 - iii** state how much would appear in the balance sheet as at 30 June 2010 for accrued expenses.
- a** Nina Day borrowed \$10 000 on 1 August 2009 at 9% per annum. The loan agreement requires Nina to pay interest every three months. The interest expense account (before adjustments) showed a debit balance of \$675.
 - b** A firm pays wages of \$2 000 on a weekly basis. The pay week runs from Friday to the next Thursday (excluding weekends), and staff are paid on the Thursday after the work has been completed. Balance day falls on Tuesday, 30 June 2010. The wages account (before adjustments) showed a debit balance of \$106 000.
 - c** Sales during June amounted to \$4 600. Commission is paid to sales personnel at 3% of sales. This has not yet been paid. The commission expense account (before adjustments) showed a debit balance of \$680.
 - d** Advertising of \$4 000 was incurred for the four months ending 31 August 2010, but only one-fifth of this had been paid as a deposit. The advertising for the year (before adjustments) showed a debit balance of \$15 000.

★★ 10.21 Unearned revenues

For each of the separate scenarios below:

- i** show the general journal entries necessary for the following balance-day adjustments
 - ii** state how much would appear in the income statement for the year ended 30 June 2010 for each revenue item
 - iii** state how much would appear in the balance sheet as at 30 June 2010 for unearned revenues.
- a** The business leases out part of its building for \$25 200 per annum. The tenant pays quarterly in advance. The last payment was received on 1 May 2010. The rent revenue account (before adjustments) showed a credit balance of \$12 600.
 - b** Commission of 5% was paid in advance on anticipated sales of \$40 000. The commission revenue account (before adjustments) showed a credit balance of \$19 000.

★★ 10.22 Accrued revenues

For each of the separate scenarios below:

- i** show the general journal entries necessary for the following balance-day adjustments
- ii** state how much would appear in the income statement for the year ended 30 June 2010 for each revenue item

- iii state how much would appear in the balance sheet as at 30 June 2010 for accrued revenues.
- a The business is paid commission of 4% of sales on a quarterly basis. The last commission was paid in April. Sales in May and June amounted to \$30 000 and \$28 000, respectively. The commission revenue (before adjustments) showed a credit balance of \$14 000.
- b The business has \$45 000 invested in a bank account that pays monthly interest at 4% per annum. As at 30 June 2010, interest for June had not been received. The interest revenue account (before adjustments) showed a credit balance of \$1 300.
- c The business leases out part of its building for \$48 000 per annum. The tenant is required to pay quarterly. The last payment was received on 1 March 2010. The rent revenue account (before adjustments) showed a credit balance of \$36 800.
- d In February 2010, the business successfully sued Ajax Co. for \$150 000. The court ordered payment be made by 31 May 2010. To date, two-thirds of the amount has been received. Under the court order, any amounts not paid by this date will accrue interest at the rate of 6% per annum.

★★ 10.23 Balance-day adjustments

An extract from the trial balance of Rhonda's Roses is shown below. You are required to:

- i show the general journal entries necessary for the balance-day adjustments below
- ii show how the trial balance figures would appear after the adjustments have been made.

Rhonda's Roses
Trial balance (extract) as at 30 June 2010

Account	Debit \$	Credit \$
Sales		254 000
Commission		1 360
Interest		1 300
Rent	16 000	
Wages	36 000	
Investment	24 000	
Loan from Westpac		95 000

- a Commission is received in the month following sales at the rate of 4.5%. Monthly sales for June amounted to \$25 000.
- b The investment earns 5% per annum, and the interest is received one month in advance.
- c The business has been renting its current premises since 1 October 2009. Rent is always paid one month in advance.
- d Wages of \$3 600 per week are paid on a weekly basis for a six-day working week on a Friday. June 30, 2010 is a Tuesday.

★ 10.24 Inventory adjustments

Briefly explain why there is often a discrepancy between the actual stock on hand and the recorded stock-on-hand figures.

★ 10.25 Inventory adjustments

For each of the separate scenarios below, show how the general journal entry would appear to record the adjustment.

- a Granny May's stock record for teddy bears showed 12 bears on hand at a cost price of \$5.50 each. A physical stocktake revealed only 10 bears.
- b Harlequin Music had the following stock records at 30 June 2010:
The 30 June stocktake revealed 100 Yamaha pianos, 5 Suzuki violins and 14 Suzuki bows on hand.

Yamaha pianos 100	Unit value \$1 600	Suzuki violins 6	Unit value \$170	Suzuki bows 16	Unit value \$45
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★ 10.26 Depreciation

Briefly explain the 'cost-allocation concept' of depreciation.

★★ 10.27 Depreciation

For each of the separate scenarios below:

- i** show the general journal entries necessary for the following balance-day adjustments
 - ii** state how much would appear in the income statement for the year ended 30 June 2010 for each depreciation expense
 - iii** state how much would appear in the balance sheet as at 30 June 2010 for accumulated depreciation.
- a** On 1 July 2009, the business had motor vehicles valued at \$66 000 and a balance in the accumulated depreciation account of \$4 000. Depreciation is charged annually at 15% reducing balance.
- b** On 31 March 2010, Brenda Fargo purchased a new delivery vehicle valued at \$45 000 with a residual value of \$11 000. The reducing balance method of depreciation is to be applied at 25% per annum.
- c** Niles Crane had office furniture valued at \$6 000 on 1 July 2009. The accumulated depreciation account had a balance of \$1 000. Depreciation at 10% per annum is to be recorded using the straight line method.

★ 10.28 Bad and doubtful debts

Distinguish between the terms 'bad' and 'doubtful' debts.

★★ 10.29 Doubtful debts

Explain which of the accounting assumptions and qualitative characteristics are pertinent to the inclusion of a provision for doubtful debts figure in the balance sheet and a doubtful debts figure in the income statement.

★★ 10.30 Doubtful debts

D Wigan's ledger reveals an accounts receivable balance of \$145 000. It is estimated that 4% of accounts receivable will not be collected. Calculate the provision for doubtful debts figure for the business. Record the necessary entry in the general journal for this amount, and show the relevant extracts from the income statement and balance sheet as at 30 June 2010.

★★ 10.31 Bad and doubtful debts

For each of the separate situations below:

- i** show the general journal entries necessary for the following balance-day adjustments
 - ii** state how much would appear in the income statement for the year ended 30 June 2010 for bad and doubtful debts
 - iii** state how much would appear in the balance sheet as at 30 June 2010 for provision for doubtful debts.
- a** As at 1 July 2009, the balance of the provision for doubtful debts account was \$6 500. The balance of the accounts receivable account on 30 June 2010 was \$109 000 (including \$9 000 in bad debts written off during the year). The new provision for doubtful debts account is to be 9% of the accounts receivable control balance.
- b** As at 30 June 2010, the accounts receivable control balance was \$26 160 (including \$1 400 in bad debts written off during the year). The provision for doubtful debts account showed an opening balance (at 1 July 2009) of \$990. On 30 June 2010, the business was notified that Barry Houdini (a debtor) was declared bankrupt. His account of \$440 was to be written off. The new provision for doubtful debts account is to be 5% of the closing accounts receivable control balance.

★★ 10.32 Balance-day adjustments

An extract from the trial balance of Martha's Nursery is shown below. You are required to:

- i** show the general journal entries necessary for the balance-day adjustments below
- ii** show how the trial balance figures would appear after the adjustments have been made.

Martha's Nursery
Trial balance (extract) as at 30 June 2010

Account	Debit \$	Credit \$
Sales		325 000
Sales returns	4 000	
Cost of goods sold	145 000	
Advertising	5 000	
Bad debts	4 000	
Insurance	900	
Interest	360	
Rent	12 000	
Wages	16 000	
Inventory control	45 000	
Accounts receivable control	10 200	
Provision for doubtful debts		600
Fixtures and fittings	5 000	
Accumulated depreciation – fixtures and fittings		650
Delivery vehicle	45 000	
Accumulated depreciation – delivery vehicle		6 000
Loan from AGC Finance Co.		25 000

- a** A physical stocktake revealed a shortage of five units of stock at \$4 per unit.
- b** Commission is paid annually to the business at the rate of 2% per annum on net sales.
- c** The new provision for doubtful debts account is to be 3% of accounts receivable.
- d** Depreciation on delivery vehicles is charged at the rate of 25% per annum reducing balance.
- e** Depreciation on fixtures and fittings is charged at the rate of 20% per annum straight line.
- f** Insurance on delivery vehicle was paid on 1 March 2010 for six months.
- g** The business has been renting its current premises since 30 November 2009. Rent is always paid one month in advance.
- h** Wages of \$400 are paid weekly on Friday for a five-day working week. Balance day falls on a Wednesday.
- i** Interest of 6% per annum is payable each month on the loan account. The last payment was made in May.

★★ 10.33 Balance-day adjustments

Prepare general journal entries to record the following balance-day adjustments on 30 June 2010:

- a** Inventories are shown in the trial balance as \$12 600 and as a result of a stocktake are \$14 500.
- b** Depreciation is to be written off the following assets: furniture (original value of \$30 000) at 10% straight line (assume residual value is \$0); motor vehicle (original value of \$25 000 using the reducing balance method; written-down value of \$20 000) at 15%.
- c** Quarterly rental of \$240 for the telephone is paid on 1 May.
- d** Sales amounted to \$90 000 in June and commission is paid to sales personnel at 5%. This has not yet been paid as at 30 June.
- e** A tenant has not yet paid \$900 owing for rent to 30 June.
- f** Rent revenue of \$831 has been received for the quarter beginning 1 June 2010.
- g** Bank credit card sales amounted to \$23 000. The bank charges the business a 2.5% transaction fee on credit card sales. As at 30 June 2009, the bank had not debited this in the business's bank account.
- h** Interest on a bank loan is outstanding. The loan is \$30 000, and interest is payable at 10% per annum and due on the last day of each month. June's payment has not been made.
- i** The business has made a loan of \$12 000 to a personal friend (Pete Stoneley) of the owner. Interest is paid on the first of each month at a rate of 1% per month. Pete went overseas in May, so on 1 April he paid interest for six months.

★★ 10.34 Balance-day adjustments

From the following information, prepare the adjusting entries required on 30 June 2010.

- a** The value of inventories in the trial balance is \$23 480; stocktake of inventories on 30 June 2010 is \$18 620.
- b** Insurance of \$2 590 has been paid during the year. Of this, \$400 is applicable to the next accounting period.
- c** Quarterly rental of \$2 400 for the premises used by the business is paid on 1 May for the three months beginning from that date.
- d** Collection of revenue on behalf of the Brisbane City Council amounted to \$5 902 in the previous month and commission is paid to the business at 2.05% for this collection service. This commission has not been paid by Brisbane City Council to date.
- e** Currently, accounts receivable are \$56 100 and bad debts are \$3 500. At balance day, another accounts receivable indicated an inability to pay a debt of \$1 100. Because no provision for doubtful debts existed at this time, it was decided to create a provision to the value of 2.5% of the accounts receivable balance at balance day.
- f** Rent revenue of \$450 earned by the business has been received for the quarter beginning 1 May 2010.
- g** Bank charges owing at close of trading on 30 June 2010 are \$280.
- h** Interest on mortgage is owing at balance day for the previous six months. The value of the mortgage is \$40 000. The current rate of interest is 10% per annum.
- i** On 1 January, \$900 worth of advertising time on TV and radio had been purchased for the year. It is estimated that, due to the seasonal nature of the product sold, two-thirds of the advertising will have been seen or heard by 30 June 2010.

★ 10.35 Classified reports

Why are final reports classified?

★ 10.36 Classified reports

Draw a skeleton outline of a fully classified income statement and a fully classified balance sheet.

★ 10.37 Classified reports

Explain the classifications used in the income statement.

★ 10.38 Classified reports

Explain the classifications used in the balance sheet.

★ 10.39 Classified reports

Why would an outside party be interested in whether a liability is current or non-current?

★ 10.40 Classifying accounts

Indicate which of the following accounts are current assets and which are non-current.

- | | |
|-----------------------|--------------------------------------|
| • Prepaid rent | • Loan to Y Joyce (due in two years) |
| • Building | • Accrued commission revenue |
| • Accounts receivable | • Petty cash |
| • Inventory | • Shares in BHP Billiton |
| • Furniture | • Cash on hand |
| • Bank | • Plant and equipment |

★ 10.41 **Classified reports**

Draw up a table using the following headings, and complete with the list of accounts below.

Account	Type of account	Final report	Classification within final report
<i>Bank</i>	<i>Asset</i>	<i>Balance sheet</i>	<i>Current asset</i>
Advertising		Provision for doubtful debts	Patents
Interest paid		Depreciation on shop fittings	Office furniture
GST clearing		Accumulated depreciation – delivery vehicles	Mortgage on buildings
Accounts receivable		Cost of brochures	Accrued revenues
Prepaid expenses		Repairs and maintenance – buildings	Commission paid
Commission received		Land	Insurance – delivery vehicles
Bad debts		Shares in ABC Co. Ltd	Accrued expense
Cost of supplies			Bank overdraft
Doubtful debts			

★★ 10.42 **Classified income statement**

The following list of balances has been extracted from the books of Greg Hinds of Hinds Hardware House. Prepare a fully classified income statement for the year ended 30 June 2010.

Account	\$
Sales	78 000
Returns inwards	6 500
Advertising	2 600
Bad debts	600
Rates	1 200
Cost of goods sold	36 000
Bank charges	210
Wages	17 420
Rent received	950
Commission expense	1 340
Insurance	1 400
Telephone	2 500
Sales salaries	26 000
Electricity	3 560
Delivery expenses	1 240
Depreciation – delivery vehicle	3 200
Depreciation – shop fittings	1 520
Credit/debit card fees	360
Revenue from legal action	15 200
Donations	2 650
Showroom expenses	2 410
Inventory adjustment	230
Corporate sponsorship	21 000
Gain on disposal of furniture	290

★★ 10.43 Classified balance sheet

The following list of balances has been extracted from the books of Jerry Lewis. Prepare a fully classified balance sheet as at 30 June 2010.

Account	\$
Petty cash	260
Provision for doubtful debts	890
Shop fittings	3 260
Accumulated depreciation – delivery vehicles	13 500
Plant and equipment	45 000
Inventories control	26 000
Accounts payable control	32 000
Accounts receivable control	34 870
Mortgage on land	120 000
Bank loan (payable October 2010)	15 000
Debentures	5 000
Leasehold	35 000
Bank	6 230
Delivery vehicles	48 000
Accumulated depreciation – plant and equipment	16 900
Capital	239 930
Drawings	12 600
Land	220 000
GST clearing (Dr)	2 000

★★ 10.44 Classified reports

Given the trial balance of Doris Trading and the additional information provided, you are required to prepare:

- journal entries to record the balance-day adjustments, or a completed worksheet (if used)
- fully classified income statement and balance sheet
- journal entries to record the necessary reversing entries.

Doris Trading		
Trial balance as at 30 June 2010		
Account	Debit \$	Credit \$
Sales		166 523
Sales returns	6 524	
Cost of goods sold	38 271	
Trade creditors		35 421
Postage expense	2 250	
Advertising	16 540	
Rent expense	13 251	
Capital		69 954
Cartage outwards	1 246	
Telephone	684	
Vehicle expenses	1 112	
Trade debtors	70 652	
Light and power	879	
Debt collector's fees	525	
Manager's car	41 550	
GST clearing		400
Drawings	24 600	
Accumulated depreciation – manager's car		3 150
Provision for doubtful debts		1 610
Inventories control	15 660	
Office rent	990	
Wages and salaries	65 420	
Bank overdraft		6 546
Bank loan (due 20/8/2015)		20 000
Bad debts	3 450	
	<u>\$303 604</u>	<u>\$303 604</u>

Additional information:

- Inventories 30 June 2010 were valued at \$14 660.
- Vehicle expenses outstanding \$300.
- Advertising includes an amount of \$1 200 that was for rental of a sign for one year. This amount was paid on 1 August 2009.
- Bank interest owing: overdraft \$300, bank loan \$250.
- Received notification on 30 June 2010 that an accounts receivable owing \$200 was declared bankrupt.
- Provision for doubtful debts is to be \$2 000.
- Depreciation on the manager's car is \$3 233.

★★ 10.45 Classified reports

Petra Kirk has provided you with the following list of account balances as at 30 June 2010. You are required to prepare:

- journal entries to record the balance-day adjustments, or a completed worksheet (if used)
- fully classified income statement and balance sheet
- journal entries to record the necessary reversing entries.

Petra's Plants and Pots
Trial balance as at 30 June 2010

Account	Debit \$	Credit \$
Capital – P Kirk		2 470
Loan – S Anderson		2 500
Inventories control	8 650	
Loss on disposal of cash register	110	
Store fittings	4 500	
Accumulated depreciation – store fittings		530
Cost of goods sold	7 780	
Insurance	700	
Electricity	800	
Sales		27 200
Bank	6 430	
Credit/debit card fees	200	
Advertising	650	
Bank charges	100	
Cash register	3 000	
Provision for doubtful debts		100
Accounts payable control		6 000
Wrapping expenses	360	
Office expenses	740	
GST clearing		1 780
Accounts receivable control	6 400	
Bad debts	160	
	<u>\$40 580</u>	<u>\$40 580</u>

Additional information:

The following adjustments were required on balance day:

- A physical stocktake on 30 June 2010 revealed inventories to the value of \$8 450.
- Store fittings are to be depreciated at 15% straight line (assume no residual value).
- The cash register was purchased on 30 March 2010. It is to be depreciated at 20% reducing balance.
- Insurance applicable to the next period is \$50.
- Office expenses still owing are \$120.
- Credit/debit card fees still outstanding are \$150.
- Provision for doubtful debts to be 5% of accounts receivable control.

★★ 10.46 **Classified reports**

Ms E Bodley of Bodley Body Products has provided you with the following list of account balances as at 30 June 2010. You are required to prepare:

- a journal entries to record the adjustments, or a completed worksheet (if used)
- b fully classified income statement and balance sheet
- c journal entries to record the necessary reversing entries.



Bodley Body Products
Trial balance as at 30 June 2010

Account	Debit \$	Credit \$
Capital – Elise Bodley		20 000
Loan – M Bodley		20 000
Inventories control	10 400	
Maintenance expense	300	
Office furniture	5 000	
Accumulated depreciation – furniture		2 000
Broncos corporate sponsorship	10 000	
Interest revenue		300
Advertising	900	
Insurance	600	
Commission revenue		2 000
Sales		32 000
Petty cash advance	100	
Sales returns	2 000	
Accounts receivable control	20 000	
Rent revenue		3 000
Credit/debit card fees	300	
Cost of goods sold	13 000	
Bank charges	100	
GST clearing	150	
Office computer	2 850	
Accumulated depreciation – computer		500
Accounts payable control		10 800
Office expenses	900	
Salaries	20 000	
Bank	4 000	
	<u>\$90 600</u>	<u>\$90 600</u>

Additional information:

- Inventories at 30 June 2010 were valued at \$9 800.
- The following expenses are in arrears: office expenses \$100; salaries \$4 200; bank charges \$100.
- Rent revenue received in advance is \$500.
- It has been discovered that an error has occurred in recording. Advertising expense includes \$100 that should be recorded as an office expense.
- An annual insurance premium of \$600 was paid on 30 April 2010.
- It was decided to close the petty cash advance account because current circumstances did not warrant its operation.
- Commission revenue owing at balance day is \$1 200.
- There has been no provision for doubtful debts to date. It has been decided to create a provision of 3.75% of the balance of accounts receivable.
- Depreciate the office computer at the rate of 20% reducing balance.
- The office furniture has a useful life of five years and is being depreciated on the straight line basis (assume no residual value).

★★ 10.47 **Classified reports**

J Du lists account balances as at 30 June 2010 as per the following trial balance. You are required to prepare:

- a journal entries to record the balance-day adjustments, or a completed worksheet (if used)
- fully classified income statement and balance sheet
- journal entries to record the necessary reversing entries.

Jo An Du
Trial balance as at 30 June 2010

Account	Debit \$	Credit \$
Capital – Jo An Du		40 000
Advertising	1 798	
Accounting fees	1 365	
Bank charges	883	
Cleanaway services expenses	1 487	
Provision for doubtful debts		2 077
Electricity	2 880	
Protective clothing for staff	1 060	
Insurance – general	1 008	
Accumulated depreciation – vehicle		3 654
WCBQ – Workers' compensation expense	4 693	
Insurance – vehicle	2 514	
Bad debts	2 092	
Office expenses	5 413	
Cost of goods sold	95 698	
Debentures in AGC Finance Ltd	12 000	
Rates	450	
Sales		260 000
Accounts receivable control	14 302	
Petty cash advance	100	
Maintenance expense	160	
Superannuation expense	3 000	
GST clearing	815	
Equipment	31 100	
Telephone	4 377	
Wages – employees	53 744	
Vehicle expenses	4 713	
Accounts payable control		14 252
Drawings	23 970	
Accumulated depreciation – equipment		16 591
Interest revenue		1 200
Bank	12 277	
Vehicle	23 000	
Inventories control	32 875	
	\$337 774	\$337 774

Additional information:

- Inventories (30 June 2010) were \$31 900.
- Telephone expenses remaining outstanding were \$120.
- Advertising has been paid in advance, \$170.
- Provision for doubtful debts is to be 10% of accounts receivable.
- Depreciate the motor vehicle at the rate of 25% per annum reducing balance.
- The general insurance premium of \$1 008 has been paid on 30 April 2010 for 12 months.
- Interest revenue owing at balance day is \$400.
- Interest revenue of \$120 has been received during this accounting period but is applicable to the next accounting period.
- The vehicle is used for sales purposes.

Round figures to the nearest whole dollar where necessary.

★★ 10.48 Classified reports

The following list of balances as at 31 December 2010 is provided for Shannon Hulbert Trading. You are required to prepare:

- journal entries to record the balance-day adjustments, or a completed worksheet (if used)
- fully classified income statement and balance sheet
- journal entries to record the necessary reversing entries.



Shannon Hulbert Trading
Balances as at 31 December 2010

Account	\$
Capital – S Hulbert	503 900
Bad debts	2 000
Provision for doubtful debts	4 500
Inventories control	357 000
Delivery vehicles	89 000
Accumulated depreciation – delivery vehicles	18 170
Buildings	100 000
Patent rights	16 000
Sales salaries	234 000
Petty cash advance	500
Commission – sales	40 000
Land	50 000
Delivery vehicle expenses	12 000
Advertising	15 000
Loss from theft	29 040
Office salaries	345 000
Cost of goods sold	442 490
Accountancy fees	10 000
Rent revenue	5 600
Bank	12 000
Interest on mortgage	16 000
Accounts payable control	353 000
Furniture and fittings	120 000
Accumulated depreciation – furniture and fittings	40 000
Rates	39 000
Cash in hand	4 760
Legal expense	7 400
Sales returns and allowances	7 430
Postage expenses	2 490
Direct mail selling expenses	6 500
Stationery	4 900
Drawings – S Hulbert	17 000
Accounts receivable control	363 200
Loan to C Sampson (due 30/3/2013)	40 000
Interest revenue	8 540
Shares in R Hassan Co. Ltd	20 000
Damages from successful lawsuit	12 000
Sales	1 457 000

Round figures to the nearest whole dollar.

Additional information:

- Inventories, valued at the lower of cost or net realisable value as at 31 December 2010, are \$402 000.
- Depreciation is to be written off: delivery vehicles – 25% reducing balance; furniture and fittings – 15% straight line (assume no residual value); patent rights – amortise over life (16 years).
- Expenses outstanding: direct mail selling expenses \$2 000; interest on mortgage \$1 300; accountancy fees \$2 500.
- Revenues outstanding: interest revenue \$1 500; interest on loan to C Sampson 5% per annum (interest is received annually on 30 June).
- Postage stamps on hand on balance day are \$100.
- The rates are to be divided between the office and the showroom in the ratio of 6:4, respectively.
- Provision for doubtful debts is \$5 000.

★★ 10.49 Classified reports

Amanda Blakey, the proprietor of Amanda Enterprises, has prepared the following list of balances as at 30 June 2010 but requires your help to prepare:

- a** journal entries to record the balance-day adjustments, or a completed worksheet (if used)
- b** fully classified income statement and balance sheet
- c** journal entries to record the necessary reversing entries.

Amanda Enterprises
Balances as at 30 June 2010

Account	\$
Loan to P Hauritz (due to be repaid 30/4/2018)	2 000
Provision for doubtful debts	3 500
Inventories control	24 000
Motor vehicle	18 000
Accumulated depreciation – motor vehicle	6 000
Building	40 000
GST clearing (Dr)	14 000
Salaries and wages	23 000
Petty cash advance	800
Sales	90 000
Loan from Y Chen (due 31/3/2011)	40 000
Motor vehicle expenses	600
Advertising	1 200
Loss on sale of asset	800
Freight outwards	1 500
Cost of goods sold	18 600
Photocopying expenses	1 800
Bank	1 500
Interest on loan	800
Furniture	16 000
Accumulated depreciation – furniture	2 500
Rates	600
Cash in hand	200
Commission revenue	8 000
Returns inwards	1 000
Office expenses	3 000
Selling expenses	4 000
Stationery	900
Telephone and fax expenses	300
Trade debtors	45 000
Manager's salary and bonus	40 000
Interest revenue	500
Trade creditors	58 000
Government bonds	3 000
Bad debts	2 100
Lawsuit damages expense	10 000
Legal expenses	9 000
Bank charges	100
Rent revenue	3 100
Copyright held	6 000
Office equipment	30 000
Accumulated depreciation – office equipment	10 000
Drawings – A Blakey	700
Capital – A Blakey	98 900



Additional information:

- Inventories (30 June 2010) are \$12 000.
- Legal expenses remaining outstanding from damages claim are \$12 000.
- Vehicle expenses outstanding are \$140.
- Provision for doubtful debts to be 6% of trade debtors.
- Copyright was purchased on 1 January 2010 and is to be amortised over six years.
- Depreciate office equipment at a rate of 25% per annum using the reducing balance method.
- The furniture is to be depreciated at a rate of 10% per annum using the straight line method (assume no residual value).
- The motor vehicle is being depreciated using the straight line method. When it was purchased on 1 July 2007, it had an estimated life of four years and an estimated residual value of \$6 000.
- An electricity account on 30 June showed \$230 owing for supply for the three months to 30 June 2010.
- Interest on government bonds is owing on balance day. The bonds were purchased nine months ago, and 10% interest for the year will be paid in three months' time.
- P Hauritz is in arrears with an interest payment on the loan Amanda Blakey made to her. When it was arranged, she agreed to pay \$50 interest every six months. The payment for the past six months has not been received to date.

★★★ 10.50 Decision-making 1 – assumptions and qualitative characteristics

Read the following information and analyse what accounting assumptions and qualitative characteristics are not being followed. Write a memo to Jock McIntosh detailing this analysis, and recommend any changes you would make.

Nine months ago, Jock McIntosh commenced business with a view to building the business up and then liquidating it as he wants to go overseas for an extended holiday. He now wishes to sell the business and has prepared the following balance sheet for any prospective buyers.

McIntosh Produce Store
Balance sheet as at 30 June 2010

	\$	\$	\$
<i>Owner's equity</i>			
Capital			<u>\$20 000</u>
Represented by:			
<i>Assets</i>			
Bank	3 000		
Accounts receivable	500		
Delivery van	10 000		
Motor vehicle	<u>15 000</u>	28 500	
<i>Less Liabilities</i>			
Bank loan		<u>8 500</u>	<u>\$20 000</u>

Additional notes:

Although McIntosh Produce Store has some accounts payable, these have not been included in the balance sheet because Jock intends paying these off before the business is actually sold. He also intends to pay back \$500 that he has taken from the till over the past three months. The motor vehicle actually belongs to his wife, but she does not need it during the day so Jock uses it for business purposes.

★★★ 10.51 Decision-making 2 – assumptions and qualitative characteristics

Read the following information and analyse what accounting assumptions and qualitative characteristics are not being followed. Write a memo to J O'Reilly detailing this analysis, and recommend any changes you would make.

J O'Reilly carries out business as a retailer of toys and novelties at Shop 6A, 299 Leybey Street, Sydney. Her private address is 134 Bridge Street, Sydney. The following statement was produced by J O'Reilly's accountant on 30 June 2009.

J O'Reilly					
Balance sheet as at 30 June 2009					
	2008		2009		
	\$	\$	\$	\$	\$
Owner's equity		\$266 100			\$255 750
Represented by:					
Current assets					
Bank	25 000		22 450		
Accounts receivable	26 000		30 000		
Inventories	298 000		286 400		
Prepaid expenses	8 800	357 800	9 900	348 750	
Less Current liabilities					
Accounts payable	82 000		69 000		
Loan	44 700	126 700	35 000	104 000	
<i>WORKING CAPITAL</i>		231 100		244 750	
Add Non-current assets					
Motor vehicle	20 000		20 000		
Plant and equipment	150 000	170 000	131 000	151 000	
		401 100		395 750	
Less Non-current liabilities					
Mortgage		135 000		140 000	\$255 750

In September 2009, J O'Reilly's accountant resigned and so she produced the June 2010 statement (shown below) herself.

J O'Reilly					
Balance sheet as at 30 June 2010					
ASSETS		\$	LIABILITIES		\$
Bank		27 401.24	Accounts payable		85 000.46
Patents		0.00	Loan		30 000.58
Accounts receivable		32 500.52	Mortgage (134 Bridge St)		150 000.00
Inventories		180 000.70	Mortgage		32 500.58
Computer disk		200.35			297 501.62
Furniture		7 500.90			
Petty cash advance		300.00			
Motor vehicle		13 000			
Buildings & equipment – 134 Bridge Street, Sydney		250 000	OWNER'S EQUITY		
		\$510 903.71	Capital		300 000.68
			Less Drawings		86 598.59
					213 402.09
					\$510 903.71

No purchases or sales of non-current assets occurred during the financial year ended 30 June 2010.

RD2

Cash flow statement

- The nature of cash
- Categories of cash
- Structure of the statement
- Preparing a cash flow statement from financial reports

Chapter



Already know	<ul style="list-style-type: none"> What cash is and its importance to a business How to prepare journals and ledger accounts
Need to know	<ul style="list-style-type: none"> Nature of cash and cash flows Preparing the cash flow statement, incorporating the reconstruction of relevant ledger accounts
Using this knowledge	<ul style="list-style-type: none"> <i>Provides information for decision-making through the analysis of the movement of cash</i>

ACCOUNTING VOCABULARY

cash equivalents
cash flow statement
cash flows

financing activities
investing activities
operating activities

Learning objectives

After completing this chapter, you should be able to:

- 1 understand and explain the nature of cash and the purpose of the cash flow statement
- 2 understand how cash inflows and outflows are categorised
- 3 understand the structure of the cash flow statement
- 4 prepare the cash flow statement, incorporating the reconstruction of relevant ledger accounts.

The nature of cash

Learning objective 1

A cash flow statement is a financial report prepared at the end of the accounting period, in conjunction with the income statement and balance sheet.

Any movement of cash into and out of a business is referred to as a *cash flow*.



Cash flow is cash movement resulting from transactions with parties external to the entity.

Cash flow statement
[AASB 1007]

The current cash position of a business is obtainable through the bank account. To help identify where cash comes from and where it is spent, a cash flow statement is prepared. Within a business the preparation of this statement is based on the cash receipts and payments records, but is prepared from information in the end-of-period reports. The cash flow statement summarises the cash received from and paid to external parties over a set period of time.



The **cash flow statement** is a financial report that indicates the movement of cash receipts and payments resulting from transactions with parties outside the enterprise over a given period of time.

In the cash flow statement, 'cash' refers to cash and cash-equivalent items. For any item to be included as a cash equivalent, it must be a short-term, highly liquid investment that is readily convertible into cash and forms part of the entity's cash management function.

[11.1] is a summary of the items that are considered to be 'cash' and 'cash equivalents'.

[11.1]

Bank bills are investments with the bank that are payable by the bank on demand or at some time in the future.

Cash	Cash equivalents
<ul style="list-style-type: none"> • Cash on hand • Bank • Any at-call deposits with a bank or financial institution 	<ul style="list-style-type: none"> • Highly liquid investments such as: Bank bills Non-bank bills Money market deposits • Borrowings: Bank overdrafts

The money market is an official financial outlet where funds can be borrowed or lent.

For money market deposits to be included as cash equivalents, they must be very near to their maturity date to ensure an accurate reflection of their value.

Cash equivalents are held as an alternative to cash in the bank because:

- higher returns are generated (such as interest)
- they are very liquid (easily converted to cash)
- they are accessible (quickly converted to cash).

Purpose of the cash flow statement

The purpose of the cash flow statement is to assist the user in assessing the ability of the business to:

- generate a positive cash flow where inflows are greater than outflows
- service its debts (pay interest on borrowings or GST owing)
- fund any desired future expansion or changes
- acquire external funds when necessary
- pay drawings (if a sole trader) or dividends (if a company).

The cash flow statement provides a link between the income statement and the balance sheet. The income statement gives the business an idea of where cash from revenue was earned and expenses incurred. Two consecutive period balance sheets will allow the business to calculate the total change in cash held by the business from one period to the next. The cash flow statement, however, shows in detail how and where the cash balance of the business increased and decreased.

Review & practice 1

- When** is a cash flow statement prepared?
- Explain what the difference is between 'cash' and 'cash equivalents'.
- What** is the purpose of preparing a cash flow statement?
- Why** are cash equivalents included as 'cash' in the cash flow statement?
- How** does the cash flow statement provide a link between the income statement and the balance sheet?

Categories of cash

Learning objective 2

Entries in the bank account can be categorised to assist in the preparation of the cash flow statement. The three general categories of activity are:

- operating
- investing
- financing.

Within each of these areas, cash is received (inflows) and paid (outflows).

Operating activities involve a movement of cash that relates to the provision of goods and services.

Investing activities relate to the acquisition and disposal of non-current assets and investments. 'Investing' refers to the payment of cash to buy assets that will assist the growth of the business. A principal reason for buying assets is that they can then be used to generate revenue. Therefore, an outflow of cash to purchase an asset is an 'investing activity'. Cash can also inflow from investing activities through the sale of an asset.

Financing activities relate to changing the size and composition of the financial structure of the entity through equity and borrowings. If an entity borrows money, it represents an inflow of cash to the business. A business can also be financed by the owner contributing cash as capital. Any cash drawings by the owner are an outflow of cash that decrease the amount of equity the owner has in the business.

Table [11.2] summarises the types of receipts and payments under the three categories.

[11.2]

Cash receipts	Cash payments
Operating activities	
Receipts from customer sales (cash and credit)	Payments (cash and credit) to suppliers
Revenue from other operating activities (rent, commission, dividends)	GST owing to the ATO
GST reclaimable	Operating expenses (wages, rent, etc.)
Investing activities	
Receipt of security deposit	Purchase of assets
Payment of loan from other entities	Purchase of investments
Sale of assets	Loan to other entity
Sale of investments	Payment of security deposit
Financing activities	
Owner's investment of cash	Owner's drawings
Borrowings by business (loans)	Repayment of loans/borrowings

GST reclaimable is not actually received as cash. In preparing the cash flow statement, however, this amount (which is deducted from GST owing) is shown separately as an inflow of cash.

Security deposits usually are paid only in the beginning of a business's life to utilities companies, such as Energex. Although rarely encountered, they would be categorised as an investing activity as they are paid in order to secure the service and are refundable at a later date.



To help in understanding the cash flow statement, the statement will initially be prepared from the bank account. Figure [11.3] shows the division of cash flows into the categories of operating, investing and financing activities from the bank account of R Malcolm of Malcolm Meats.

[11.3]

Inflows				Outflows			
Malcolm Meats General ledger (extract)							
Bank a/c							
2009				2009			
Financing	→	Aug 1	Capital – R Malcolm	15 000	Aug 1	Rent	250
Financing	→	4	Loan – Ausland Bank	10 000	2	Insurance	600
Investing	→	12	Shares in Teleco Ltd	1 000	4	Rates	150
Operating	→	13	ABC Co. Ltd (dividend)	600	5	Wages	1 000
Operating	→		Commission revenue	150	13	Furniture	2 500
Operating	→	16	Accounts receivable	885	19	Drawings	500
					27	Accounts payable	2 955
					31	Balance c/d	19 680
				<u>\$27 635</u>			<u>\$27 635</u>
		Sept1	Balance b/d	19 680			

			Inflows	Outflows		
Malcolm Meats General ledger (extract)						
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$	
2009						
Bank a/c						
Aug 1	Capital – R Malcolm		15 000		15 000	Dr Financing
	Rent			250	14 750	Dr Operating
2	Insurance			600	14 150	Dr Operating
4	Loan – Ausland Bank		10 000		24 150	Dr Financing
	Rates			150	24 000	Dr Operating
5	Wages			1 000	23 000	Dr Operating
12	Shares in Teleco Ltd		1 000		24 000	Dr Investing
13	ABC Co. Ltd (dividend)		600		24 600	Dr Operating
	Commission revenue		150		24 750	Dr Operating
	Furniture			2 500	22 250	Dr Investing
16	Accounts receivable		885		23 135	Dr Operating
	Drawings			500	22 635	Dr Financing
31	Accounts payable			2 955	19 680	Dr Operating



Review & practice 2

- a** What are the main differences between operating, financing and investing activities?
- b** Categorise the transactions in the bank account on page 548 into:
- i operating
 - ii financing
 - iii investing.



Jack Stathis Enterprises					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2009			2009		
			Bank a/c		
July 1	Accounts receivable	1 000	July 3	Investment (30-day bill)	500
3	Rent revenue	200	4	Wages	930
7	Capital – J Stathis	4 000	9	Accounts payable	1 000
12	Loan from Z Bank	10 000	17	Repayment of loan	5 000
16	Cash sales	1 200	19	Stationery	200
17	Interest	1 500	23	Drawings	2 000
20	Rent revenue	200			
23	30-day money market deposit (matured)	20 000			
31	Interest revenue	520			

Jack Stathis Enterprises					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2009					
Bank a/c					
July 1	Accounts receivable		1 000		1 000 Dr
3	Investment (30-day bill)			500	500 Dr
	Rent revenue		200		700 Dr
4	Wages			930	230 Cr
7	Capital – J Stathis		4 000		3 770 Dr
9	Accounts payable			1 000	2 770 Dr
12	Loan from Z Bank		10 000		12 770 Dr
16	Cash sales		1 200		13 970 Dr
17	Repayment of loan			5 000	8 970 Dr
	Interest		1 500		10 470 Dr
19	Stationery			200	10 270 Dr
20	Rent revenue		200		10 470 Dr
23	30-day money market deposit (matured)		20 000		30 470 Dr
	Drawings			2 000	28 470 Dr
31	Interest revenue		520		28 990 Dr

► Exercises 11.1 to 11.5, page 574

Structure of the statement

Learning objective 3

The information from [11.3] is now presented in a report format in the following cash flow statement [11.4]. Note that the wording in the statement differs from that used in the bank account. The statement is descriptive in nature. It must describe where cash came from and went to under the prescribed headings, whereas the wording in the bank account is dictated by double entry and refers to account names.



[11.4]

Malcolm Meats
Cash flow statement
for the month ended 31 August 2009

	\$	\$	
Cash flows from operating activities			
Inflows			
Receipts from customers	885		
Interest/dividends received	600		
Other revenue received	150		
Outflows			
Payments to suppliers	(2 955)		
Payments to employees	(1 000)		
Payment of operating expenses	(1 000)		
Net cash used in operating activities		(3 320)	← This figure is the sum of the operating inflows and outflows
Cash flows from investing activities			
Inflows			
Sale of shares	1 000		
Outflows			
Purchase of furniture	(2 500)		
Net cash used in investing activities		(1 500)	← This figure is the sum of the investing inflows and outflows
Cash flows from financing activities			
Inflows			
Proceeds from loans	10 000		
Capital contribution	15 000		
Outflows			
Payments of drawings	(500)		
Net cash provided from financing activities		24 500	← This figure is the sum of the financing activities
Net increase (decrease) in cash held		19 680	← Add the three figures above
Add Opening cash balance held		0	← In this case, there was no opening balance
Cash balance at the end of the period		<u>\$19 680</u>	← Net increase (decrease) plus opening balance

✓ Helpful hints

- The cash balance at the end of the period must equal the total of cash and cash equivalents listed as current assets in the balance sheet at the end of the same period. If these figures do not equate, then an error has been made
- Net cash provided by each activity can be a positive or negative figure.

Review & practice 3

Present the bank account information from review & practice **2b** on page 548 for Jack Stathis Enterprises in a cash flow statement for the month of July 2009.

Preparing a cash flow statement from financial reports

Learning objective 4

In a large organisation, preparing the cash flow statement from the bank account would be very inefficient due to the volume of transactions. In addition, interested parties outside the organisation (financial analysts) would not have access to information detailed in the ledger. Consequently, information from the financial reports can be used to facilitate the preparation of the cash flow statement.

The difficulty that arises with this approach is that the figures in the financial reports have been prepared on an accrual basis. Therefore, accrual items need to be identified and adjustments made to find the actual cash paid or received for these items. For example:

- The sales figure in the income statement represents both cash and credit sales. The cash flow statement will show only cash sales and cash received from credit customers.
- The figure for an expense such as insurance in the income statement could involve adjustments for both prepaid and accrued amounts.
- Bad and doubtful debts in the income statement have occurred due to book entries based on accrual accounting principles.
- Depreciation (amortisation) expense is also a book entry complying with the principles of accrual accounting.

In addition, any internal transfers of cash need to be eliminated.

Each of the above examples either does not involve cash or only some portion of the amount involves cash. Therefore, the figures from the end-of-period financial reports need to be adjusted to reflect the cash inflow (outflow) that is presented in the cash flow statement.

A summary of steps that can be followed when preparing a cash flow statement is as follows.



Step 1 Cash flows from operating activities

Calculate the following:

Inflows

- a Receipts from customers
- b Interest and dividends received
- c Other revenue received

Outflows

- d Payments to suppliers
- e Payments to employees
- f Payment of interest expense
- g Payment of other operating expenses

Step 2 Cash flows from investing activities

Ascertain the following:

Inflows

- Receipts from sales of non-current assets
- Repayments of loan to other entities made as an investment

Outflows

- Purchase of non-current assets
- Loans made to other entities as an investment

A review and practice question provided on page 561 can be worked at the end of each step.

Step 3 Cash flows from financing activities

Determine if there are any of the following:

Inflows

- a Proceeds from loans or borrowings
- b Capital contributions

Outflows

- c Payments of loans or borrowings
- d Drawings

Step 4 Cash on hand at the end of the period

Determine the cash balance at the end of the period as follows:

- a Total the net inflows/outflows from steps 1 to 3.
- b Insert the opening balance of cash shown in the balance sheet at 30 June 2009 (becomes the opening balance on 1 July 2009).
- c Calculate the balance of cash at the end of the period (total steps 4a and 4b).

The reports in [11.5] prepared for Alyssa Grace, proprietor of Marshmallow Mania, will be used to prepare the cash flow statement. Before beginning the steps, you may wish to categorise the accounts into operating, investing and financing. This is shown here in small blue letters as O, I, F.

[11.5]

Marshmallow Mania Income statement for the year ended 30 June 2010			Marshmallow Mania Balance sheet as at 30 June		
	\$	\$		2010 \$	2009 \$
Sales			ASSETS		
O Cash sales	2 200		Current assets		
O Credit sales	4 650	6 850	Bank	5 330	9 946
Less Cost of goods sold		3 300	Deposits at call	4 000	0
GROSS PROFIT		3 550	O Accounts receivable control	3 487	854
Add Other revenue from ordinary activities			Inventories control	2 490	840
O Interest dividends received	220		O Accrued revenue – commission	100	0
O Commission revenue	680		O Prepaid expense – insurance	500	0
		900	Non-current assets		
		4 450	I Furniture	6 700	0
Less Other expenses from ordinary activities			I Loan to T Lewis	2 000	0
O Rent	560			24 607	11 640
O Insurance	100		Less LIABILITIES		
O Wages	4 450		Current liabilities		
O Interest expense	100		O Accounts payable control	3 957	200
Bad debts expense	280	5 490	O Accrued expenses – wages	650	0
NET PROFIT/(LOSS)		(\$1 040)	Non-current liabilities		
			F Bank loans (mature July 2012)	8 500	0
				13 107	200
			NET ASSETS	\$11 500	\$11 440
			Owner's equity		
			Alyssa Grace – capital	11 440	10 000
			F Extra capital contributed	2 000	0
			Net profit/(loss)	(1 040)	1 440
			F Drawings	(900)	0
				\$11 500	\$11 440

Additional information:

- Credit inventory purchased during the year ended 30 June 2010 totalled \$4 950.
- Furniture was purchased on 30 June 2010, so it has not been depreciated in the income statement.
- All drawings and capital contributions are cash.
- Assets were purchased for cash.

Step 1



Cash flows from operating activities

a Calculate receipts from customers.

The cash received from customers includes:

- cash received from cash sales
- cash received from credit customers.

The cash received from cash sales is easily discerned from the income statement. The cash received from accounts receivable is ascertained by reconstructing the accounts receivable control account. This is shown in [11.6].

[11.6]

DY = During year.

Accounts receivable control a/c

2009/2010				2010			
Balance sheet	July 1	Balance b/d	854	DY	Bank	1 737	← Calculate this missing figure
Income statement	June 30	Sales	4 650	June 30	Bad debts	280	← Income statement
					Balance c/d	3 487	← Balance sheet
			<u>\$5 504</u>			<u>\$5 504</u>	
	July 1	Balance b/d	3 487				

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
July 1	Balance b/d		854 Dr	← Balance sheet
June 30	Sales	4 650	5 504 Dr	← Income statement
June 30	Bad debts		280	← Income statement
DY	Bank		1 737	3 487 Dr

Calculate this missing figure

Period end balance is the new balance of account shown in the balance sheet

The source of each figure in this account has been indicated in [11.6]. Note that while bad debts (from the income statement) does not affect cash directly, the impact of this account is felt on the amount of cash received from accounts receivable. The unknown figure is the cash that has been received from accounts receivable in payment of their debts. This is the figure in the control account highlighted above and is the balancing item given that the rest of the information is known.

The figure for cash sales (\$2 200) is now added to the cash figure determined in the accounts receivable control account to find the total amount of receipts from customers for the cash flow statement:

	\$
Cash sales	2 200
Receipts from accounts receivable	1 737
Total receipts from customers	<u>3 937</u>

The total inflow of cash (\$3 937), is now entered in the cash flow statement (extract) beside the line 'Receipts from customers' [11.7], on page 556.

b Calculate interest and dividends received.

Where revenue has been received from dividends and interest, these items are disclosed on a separate line in the cash flow statement and are distinguished from other revenue received. In this case, cash of \$220 has been received from interest revenue but there is no dividend revenue. Therefore, \$220 is shown in the cash flow statement beside the line 'Interest/dividends received'.

If accrual accounts such as accrued interest revenue appeared in the balance sheet, then the revenue account would have to be reconstructed to find the cash actually received during the period. An example of this is shown in step 1c below.

c Calculate other revenue received.

As there is an account for accrued revenue commission in the balance sheet in [11.5] on page 551, this indicates that the figure for commission revenue in the income statement of \$680 is not the actual cash received for the period for commission. The commission revenue account must therefore be reconstructed to find the actual cash received for commission revenue for the period. This is shown below.

Commission revenue a/c				
Income statement →	2009/2010			
	June 30	Profit and loss summary	680	
			<u>\$680</u>	
	2009/2010			
	DY	Bank	580	← Calculate this missing figure
	June 30	Accrued revenue	100	← Balance sheet
			<u>\$680</u>	

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
Commission revenue a/c				
DY	Bank		580	580 Cr
June 30	Accrued revenue		100	680 Cr
June 30	Profit and loss summary	680		0

Recall from chapters 2 and 10 that, when a balance-day adjustment for accrued revenue is made, the accrued revenue account, an asset, is debited and the revenue account is credited. Therefore, the revenue account above has been credited with the \$100 recorded in the balance sheet for accrued revenue.

The missing figure of \$580 represents an inflow of cash relating to operating activities and is entered in the cash flow statement beside the line 'Other revenue received' [11.7], page 556.

d Calculate payments to suppliers.

The cash paid to suppliers refers to:

- cash paid for purchases
- cash paid to accounts payable for credit purchases of inventories.

In this case, the total amount for credit purchases of inventories has been given (\$4 950), but the unknown figure is the cash paid to accounts payable in the course of the period. To determine the cash paid to accounts payable, the accounts payable account is reconstructed. This is shown on the following page.

Accounts payable a/c				
2009/2010	DY	Bank	1 193	
	June 30	Balance c/d	3 957	
			<u>\$5 150</u>	
2009/2010	July 1	Balance b/d	200	← Balance sheet
DY		Inventories control	4 950	← Additional information
			<u>\$5 150</u>	
2010	July 1	Balance b/d	3 957	

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
	Accounts payable a/c			
July 1	Balance		200 Cr	
DY	Inventories control	4 950	5 150 Cr	
	Bank	1 193	3 957 Cr	

The source of each figure in this account has been indicated. The unknown figure is the cash that has been paid to accounts payable for the credit purchases of inventories. This is the highlighted figure in the account above and is the balancing item given that the rest of the information is known.

The figure for purchases, if not supplied, would necessitate the reconstruction of the inventories control account to determine the total amount of purchases made during the period. (If cash purchases had been made, this amount would have to be given or determined from the bank account.)

The figure of \$1 193 is now entered in the cash flow statement beside the line 'Payments to suppliers' [11.7], page 556. Payments represent an outflow of cash and are therefore bracketed.

e Calculate payments to employees.

Payments to suppliers and employees can be shown on the same line in the cash flow statement, but to provide clarity in the report we will separate the two payments.

Wages expense of \$4 450 appears in the income statement. As there is an accrued expense (wages) account in the balance sheet, the figure in the income statement is not the actual cash paid for wages for the period. Recall from chapters 2 and 10 that the financial period does not generally end on the same day as the end of a pay week. An accrued expense for wages would need to be taken into account in a balance-day adjustment debiting the wages account and crediting the accrued expenses account.

The wages account is reconstructed to find the actual cash paid for wages for the period. This is shown on the following page.

The figure of \$3 800 represents the actual cash paid for wages for the period. It is entered into the cash flow statement under operating activities, beside the line 'Payments to employees' in brackets [11.7], page 556.

A more challenging example later in the chapter will show how to calculate the figure for purchases from the inventories control a/c.

Wages a/c					
2009/2010			2010		
Calculate →	DY	Bank	3 800	June 30 Profit and loss, summary	4 450 ← Income statement
	June 30	Accrued expenses – wages	650		
Balance sheet			<u>\$4 450</u>		<u>\$4 450</u>

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
Wages a/c				
DY	Bank	3 800	3 800 Dr	
June 30	Accrued expenses – wages	650	4 450 Dr	
	Profit and loss summary		4 450	0

f Calculate payment of interest expense.

Where interest and other costs of finance have been paid, the Australian accounting standards require that these are disclosed separately in the cash flow statement. As there are no accruals relating to interest in the balance sheet, then the figure of \$100 in the income statement is the actual cash paid for interest. If accrual items appear in the balance sheet relating to interest (e.g. accrued interest expense), then the interest expense account is reconstructed to find the actual cash paid for interest for the period.

The figure of \$100 for interest expense represents an outflow of cash relating to operating activities and is entered in the cash flow statement beside the line 'Payment of interest expense' in brackets [11.7], page 556.

g Calculate payments of other operating expenses.

The cash paid for operating expenses (other than payments to employees (wages) and interest expense) is found in the income statement. If any accruals (prepaid or accrued expenses) relate to these expenses, then the appropriate accrued expense or prepaid expense account would appear in the balance sheet. These expense accounts would need to be reconstructed to determine the amount of cash actually paid for the expense during the period. As there is a prepaid expense – insurance account in the balance sheet, the insurance account will be reconstructed.

Insurance a/c							
2009/2010			2009/2010				
Calculate →	DY	Cash at bank	600	June 30	Prepaid expense	500	← Balance sheet
					Profit and loss summary	100	← Income statement
			<u>600</u>			<u>100</u>	
						<u>\$600</u>	

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
	Insurance a/c			
DY	Cash at bank	600		
June 30	Prepaid expense		500	
	Profit and loss summary		100	

Calculate →

600 Dr
100 Dr

Balance sheet

0

Income statement

The figure of \$600 represents an outflow of cash for insurance for the period. Other expenses listed in the income statement (excluding wages and interest expense) are now considered. Rent of \$560 has been expensed. As there is no accrual relating to this expense, it is assumed that this is the actual cash paid for the period. Bad debts expense is a non-cash item (book entry) and has already been taken into consideration in accounting for the cash received from accounts receivable in step 1a. Therefore, the total of \$1 160 (insurance \$600 and rent \$560) is entered in the cash flow statement beside the line 'Payment of operating expenses' in brackets [11.7].

As a result of step 1, the section in the cash flow statement dealing with operating expenses is presented in [11.7].

[11.7]

Marshmallow Mania Cash flow statement for the year ended 30 June 2010 (extract)

	\$	\$
Cash flows from operating activities		
Inflows		
Receipts from customers	3 937	
Interest/dividends received	220	
Other revenue received	580	
Outflows		
Payments to suppliers	(1 193)	
Payments to employees	(3 800)	
Payment of interest expense	(100)	
Payment of operating expenses	(1 160)	
Net cash used in operating activities		(1 516)

This example shows a negative cash flow for operating activities. A positive cash flow would be described as 'net cash provided from operating activities'.

Step 2



Cash flows from investing activities

The *inflows* of cash that are concerned with the business's investing activities are generally:

- cash received as proceeds from the sale of assets (non-current assets such as furniture, motor vehicle, bonds, shares, etc.)
- cash received as repayment of a loan made previously to another party.

The *outflows* of cash that are concerned with the business's investing activities are generally:

- cash paid for the purchase of an asset (non-current assets such as furniture, motor vehicle, bonds, shares, etc.)
- cash given to another party as a loan; this is considered an investment in another business.

In order to determine whether there has been a movement (purchase or sale) in a non-current asset, the value of each non-current asset in the current and previous balance sheets must be compared.

In determining the amounts to be included in the cash flow statement for investing activities, the balances of the non-current asset accounts in the balance sheet need to be compared from one period with the next period, to find any movement that could involve cash.

a Purchase/sale of non-current assets

Furniture has been purchased at a cost of \$6 700. This represents an outflow under the 'investing activities' category in the cash flow statement and is described as 'Purchase of furniture' [11.8].

As the sale of non-current assets involves the consideration of not only the cash inflow (from the sale) but also losses or gains that are non-cash items, this makes the cash flow statement more complex. Therefore, while purchases of non-current assets will be treated as an outflow, sales of non-current assets will not be considered in this chapter.

b Loans to other entities as an investment/repayments of loans made

In comparing the assets listed in the balance sheet, a new account, Loan to T Lewis, has been generated. Loans made to external parties represent an outflow of cash in the current period. These loans are made as an investment and are not to be confused with borrowings made by the enterprise, which are classified as financing activities.

In future periods, when the loan is repaid to Marshmallow Mania, the repayments will represent an inflow of cash in investment activities. The amount of \$2 000 is entered into the cash flow statement as an investing activity next to the line 'Loan to other entities' [11.8].

As a result of step 2, the activities section in the cash flow statement dealing with investing is shown in [11.8].

[11.8]

Marshmallow Mania Cash flow statement for the year ended 30 June 2010 (extract)		
	\$	\$
Cash flows from investing activities		
Inflows		
Outflows		
Purchase of furniture	(6 700)	
Loan to other entities	(2 000)	
Net cash used in investing activities		(8 700)

Step 3



Cash flows from financing activities

The *inflows* of cash that are concerned with the business's financing activities are generally:

- cash provided by loans or other forms of borrowing
- capital (cash) contributions by the owner.

The *outflows* of cash that are concerned with the business's financing activities are generally:

- repayment of loans or other forms of borrowing
- the owner taking cash as drawings.

a Proceeds from loans or borrowings

Non-current liability accounts in the current and previous balance sheets are examined to determine if there has been an inflow or outflow of cash with respect to loans and borrowings. An increase in loans and borrowings indicates an *inflow* of cash from debt financing during the period.

In this case, a bank loan of \$8 500 is the only non-current liability. The balance of the bank loan account at the beginning of the period is zero, and at the end of the period the balance is \$8 500. This amount represents \$8 500 worth of debt financing for the business for the period. Therefore, \$8 500 is the amount recorded in the cash flow statement next to the line 'Proceeds from loans and borrowings' [11.9], page 559.

b Capital contributions and drawings

The capital account is reconstructed to determine the cash flows as a result of equity financing activities during the period. Two accounts that affect the cash flows are drawings for cash and additional cash contributions for capital. This is shown below.

Capital – Alyssa Grace a/c							
If not given in the balance sheet, calculate this missing figure	2009/2010			2009/2010			
	DY	Drawings (cash)	900	July 1	Balance b/d	11 440	← Balance sheet
	June 30	Profit and loss summary (net loss)	1 040	DY	Bank	2 000	← If not given in the balance sheet, calculate this missing figure
Income statement		Balance c/d	11 500				
Balance sheet			\$13 440			\$13 440	

Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
	Capital – Alyssa Grace a/c			
July 1	Balance b/d		11 440 Cr	← Balance sheet
DY	Bank	2 000	13 440 Cr	
	Drawings (cash)	900	12 540 Cr	← If not given in the balance sheet, calculate this missing figure
June 30	Profit and loss summary (net loss)	1 040	11 500 Cr	
		↑ Income statement	↑ Balance from balance sheet	

As was stated in the additional information, all drawings are for cash. Drawings involving items in addition to cash (e.g. inventories, other assets) would impact on accounts other than the bank account.

A total of \$2 000 is an inflow of cash from the owner, Alyssa Grace, and \$900 of drawings represents an outflow of cash. Both figures are shown in the financing activities section of the cash flow statement [11.9], page 559.

c Payment of loans and borrowings.

If the balance of the non-current liability accounts for loans and borrowings has decreased, this indicates an outflow of cash for the period. This means that loans

and borrowings have been repaid from cash. In this case, there has been no downward movement in the loans or borrowings accounts.

As a result of step 3, the section of the cash flow statement that concerns financing activities would appear as shown in [11.9].

[11.9]

Marshmallow Mania Cash flow statement for the year ended 30 June 2010 (extract)			
		\$	\$
Cash flows from financing activities			
Inflows			
Proceeds from loans and borrowings		8 500	
Capital contributions		2 000	
Outflows			
Payment of drawings		(900)	
Net cash provided from financing activities			9 600

Step 4



Determine cash balance at end of the period

a Total the net inflows/outflows from steps 1 to 3.

Add the total net cash provided from operating, investing and financing activities and insert this amount next to the line 'Net increase (decrease) in cash held'. In this case:

Net cash provided from operating activities	(1 516)
Net cash provided from investing activities	(8 700)
Net cash provided from financing activities	9 600
Net increase (decrease) in cash held	(616)

b Insert the balance of cash from the beginning of the period.

The closing balance from the last financial period is the opening balance for this financial period. The opening balance of cash held is the same as the balance for the bank account from the previous year shown in the balance sheet. In this case, insert \$9 946 against the line 'Add opening cash balance held (less overdraft)' (in this case the company has no overdraft) [11.10], page 560.

c Calculate the balance of cash at the end of the period (total steps 4a and 4b).

Finally, to complete the cash flow statement, add the above two figures to find the cash balance at the end of the period. In this case, $(\$616) + \$9\,946 = \$9\,330$. Insert the amount \$9 330 next to the line 'Cash balance at the end of the period', and the cash flow statement for Marshmallow Mania is complete [11.10], page 560.

Compare the final line in the cash flow statement (\$9 330) with the balance of the bank account in the balance sheet (\$5 330) [11.5], page 551. Why are they different? Recall from the beginning of the chapter that cash is both cash at the bank and any cash equivalents. In the case of Marshmallow Mania, the proprietor has made a short-term money market deposit of \$4 000. This amount, together with the bank account balance of \$5 330, makes up the \$9 330 determined as the final balance of cash in the cash flow statement. The two balances are therefore reconciled.

[11.10]

Marshmallow Mania
Cash flow statement
for the year ended 30 June 2010

		\$	\$
Step 1			
Cash from operating activities	Cash flows from operating activities		
	Inflows		
	Receipts from customers	3 937	
	Interest and dividends received	220	
	Other revenue received	580	
	Outflows		
	Payments to suppliers	(1 193)	
	Payments to employees	(3 800)	
	Payment of interest expense	(100)	
	Payment of operating expenses	(1 160)	
	Net cash used in operating activities		(1 516)
Step 2			
Cash from investing activities	Cash flows from investing activities		
	Inflows	0	
	Outflows		
	Purchase of furniture	(6 700)	
	Loan to other entities	(2 000)	
	Net cash used in investing activities		(8 700)
Step 3			
Cash from financing activities	Cash flows from financing activities		
	Inflows		
	Proceeds from loans and borrowings	8 500	
	Capital contributions	2 000	
	Outflows		
	Payment of drawings	(900)	
	Net cash provided from financing activities		9 600
Step 4			
Cash on hand at end of period	Net increase (decrease) in cash held		(616)
	Add Opening cash balance held (less overdraft)		9 946
	Cash balance at the end of the period		\$9 330



Review & practice 4

Use the information in the following financial reports to prepare each section of the cash flow statement for Pearce's Pies for the year ended 30 June 2010.

Pearce's Pies Income statement for the year ended 30 June 2010

	\$	\$
Sales		
Credit sales		7 182
Less Cost of goods sold		2 197
GROSS PROFIT		4 985
Add Other revenue from ordinary activities		
Commission revenue		200
		5 185
Less Other expenses from ordinary activities		
Rent	650	
Insurance	400	
Wages	1 200	
Bad debts expense	500	
General and administrative	600	
Electricity	255	3 605
NET PROFIT		\$1 580

Pearce's Pies Balance sheet as at 30 June

	2010 \$	2009 \$
Assets		
Bank	1 660	4 857
Accounts receivable control	1 582	3 000
Inventories control	5 452	702
Prepaid expense – insurance	100	0
Furniture	5 000	5 000
Shares – Telstra	2 000	0
Motor vehicle	10 000	0
	25 794	13 559
Less Liabilities		
Accounts payable control	2 605	2 300
Accrued expenses – wages	350	0
Bank loans (mature July 2014)	10 000	0
	12 955	2 300
NET ASSETS	\$12 839	\$11 259
Owner's equity		
J Pearce – capital	11 259	10 000
Net profit	1 580	1 259
	\$12 839	\$11 259

Additional information:

- All purchases of inventories are on credit. All other purchases of assets are for cash.

Cash flow statement with GST

The cash flow statement will now be prepared from financial reports as shown in [11.11] incorporating some additional elements. The additional elements that will be incorporated are:

- beginning and ending balances for accruals and prepayments
- reconstruction of the inventories control account to determine inventory purchases
- GST.

[11.11]

Musical Masterpieces Income statement for the year ended 30 June 2010

	\$	\$
Sales		
Credit sales		32 090
<i>Less</i> Cost of goods sold		<u>16 900</u>
GROSS PROFIT		15 190
Add Other revenue from ordinary activities		
Interest revenue		<u>1 250</u>
		16 440
Less Other expenses from ordinary activities		
Advertising	280	
Depreciation expense – furniture	600	
Depreciation expense – motor vehicle	3 000	
Wages and salaries	10 300	
Insurance	1 200	
Printing	250	
Interest expense	<u>200</u>	
		15 830
NET PROFIT/(LOSS)		<u><u>\$610</u></u>

Musical Masterpieces Balance sheet as at 30 June

	2010 \$	2009 \$
ASSETS		
Current assets		
Bank	21 290	14 540
Accounts receivable control	6 500	10 640
Inventories control	8 281	2 000
Prepaid expense – advertising	420	50
Accrued revenue – interest	<u>250</u>	<u>0</u>
Non-current assets		
Furniture	6 800	6 800
<i>Less</i> Accumulated depreciation – furniture	(1 200)	(600)
Motor vehicle	15 000	15 000
<i>Less</i> Accumulated depreciation – motor vehicle	(8 000)	(5 000)
Investments – shares	<u>12 000</u>	<u>0</u>
TOTAL ASSETS	61 341	43 430
Less LIABILITIES		
Current liabilities		
Accounts payable control	8 380	6 520
GST clearing	(757)	375
Accrued expenses – wages and salaries	<u>4 500</u>	<u>200</u>
Non-current liabilities		
Bank loans (mature July 2014)	<u>37 273</u>	<u>20 000</u>
	49 396	27 095
NET ASSETS	<u><u>\$11 945</u></u>	<u><u>\$16 335</u></u>

Represented by owner's equity

P Holley – capital	16 335	16 000
Net profit (loss)	610	335
Drawings	(5 000)	0
	<u>\$11 945</u>	<u>\$16 335</u>

Additional information:

- All drawings and purchases of assets are for cash.
- GST actually remitted during the period was \$1 813.

Step 1



Cash flow from operating activities

a Calculate cash receipts from customers.

The cash received from customers in this case is from credit customers only, because no cash sales are indicated in the income statement. The total cash received from account receivable is ascertained by reconstructing the accounts receivable account as shown below:

Accounts receivable control a/c					
Balance sheet	2009			2010	
	July 1	Balance b/d	10 640	DY	Bank 39 439
Income statement	June 30	Sales	32 090	June 30	Balance c/d 6 500
		GST clearing	3 209		
10% x sales			<u>45 939</u>		<u>45 939</u>

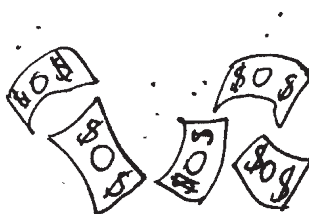
Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010				
Accounts receivable control a/c				
July 1	Balance b/d		10 640 Dr	
June 30	Sales	32 090	42 730 Dr	
	GST clearing	3 209	45 939 Dr	
	Bank		6 500 Dr	
			39 439	

Calculate this missing figure

Period-end balance in account should equal balance of account shown in the balance sheet.

The source of each figure in this account has been indicated. The unknown figure is the cash that has been received from accounts receivable. This is the highlighted figure in the account above and is the balancing item given that the rest of the information is known.

This total inflow of cash amount (\$39 439) is now entered in the cash flow statement beside the line 'Receipts from customers' in **[11.12]**, page 569.



b Calculate interest and dividends received.

Musical Masterpieces has an amount for accrued revenue (interest) in the balance sheet for the current year. This indicates that the revenue amount stated in the income statement of \$1 250 is not the actual cash received for the period for interest revenue. The interest revenue account is reconstructed to find the actual cash received for interest for the period. The reconstruction is shown below.

Interest revenue a/c					
Income statement →	2009/2010			2009/2010	
	June 30	Profit and loss summary	1 250	DY	Bank 1 000 ← Calculate this missing figure
			<u>\$1 250</u>	June 30	Accrued revenue – interest <u>250</u> ← Balance sheet
					<u>\$1 250</u>

Date	Particulars	Debit \$	Credit \$	Balance \$	
2009/2010					
	Interest revenue a/c				
	Bank		1 000	1 000 Cr	← Calculate this missing figure
June 30	Accrued revenue – interest		250	1 250 Cr	
June 30	Profit and loss summary	1 250		0 Cr	

Income statement →

c Calculate other revenue received.

As there are no other revenues to consider for Musical Masterpieces, this line is recorded as a zero in the cash flow statement [11.12], page 569.

d Calculate payments to suppliers.

The figure to be determined is the cash that has been paid to accounts payable. This is an operating cash outflow in the cash flow statement. Recall from earlier chapters that, when goods are purchased, the inventories control account and GST receivable are debited, while accounts payable or cash are credited with the full amount, including GST. To calculate the cash element, it will first be necessary to reconstruct the inventory control account to determine the purchases figure for the period. This is shown below.



Inventories control a/c				
Balance sheet	2009	July 1	Balance b/d	2 000
	2009/2010	DY	COGS	16 900
Calculate this missing figure				
	2009/2010	DY	Accounts payable	23 181
				\$25 181
	2009/2010	June 30	Balance c/d	8 281
				\$25 181
Accounts payable a/c				
Calculate this missing figure	2009/2010	DY	Bank	23 639
Balance sheet		June 30	Balance c/d	8 380
				\$32 019
	2010	July 1	Balance b/d	6 520
	DY		Inventories control	23 181
			GST clearing	2 318
				\$32 019
				Calculated from inventories control a/c 10% x inventories control amount (round up or down)
Date	Particulars	Debit \$	Credit \$	Balance \$
2009/2010 Inventories control a/c				
July 1	Balance		2 000 Dr	
DY	COGS	16 900	14 900 Cr	
	Accounts payable	23 181	8 281 Dr	
				Closing balance from balance sheet
2009/2010 Accounts payable a/c				
July 1	Balance		6 520 Cr	
DY	Inventories control	23 181	29 701 Cr	
	GST clearing		2 318	
	Bank	23 639	32 019 Cr	
			8 380 Cr	
				Calculated from inventories control a/c 10% of inventories control amount
		Calculate this missing figure		Closing balance from balance sheet

The figure of \$23 639 is now entered in the cash flow statement beside the line 'Payments to suppliers' [11.12], page 569.

e Calculate payments to employees.

Wages and salaries are a payment to employees and is an expense that does not involve GST.

An expense of \$10 300 appears in the income statement. As there is also an accrued expense account (wages and salaries) appearing in the balance sheet (with opening and closing balances), this indicates that balance-day adjustments have been necessary for wages and salaries at the end of last period and again this period. To calculate the exact amount paid to employees, both the accrued expenses account and the wages and salaries account need to be reconstructed.

These accounts will be reconstructed as 'working accounts' in T-format with a less formal appearance to show that the amounts for expenses and revenues can be calculated very quickly when opening and closing balances in accrual and/or prepayment accounts are given in the balance sheet.

Follow these six sub-steps for reconstructing an accrual account that is a liability (accrued expenses or unearned revenues) and its corresponding expense or revenue account.

RE = reversing entry
BDA = balance-day
adjustment
P&L = profit and loss
summary

Calculate this
missing figure →

Accrued expenses – wages and salaries a/c					
1/7/09	RE Sub-step 2	200	1/7/09	Balance Sub-step 1	200
30/06/10	Balance Sub-step 3	4 500	30/06/10	BDA Sub-step 4	4 500
		<u>\$4 700</u>			<u>\$4 700</u>
Wages and salaries expense a/c					
30/06/10	BDA Sub-step 4	4 500	1/7/09	RE Sub-step 2	200
30/06/10	Bank Sub-step 6	6 000	30/06/10	P&L Sub-step 5	10 300
		<u>\$10 500</u>			<u>\$10 500</u>

The liability account

The expense account

Sub-step 1

Insert the balance of the liability account from the beginning of the period (from the balance sheet) on the credit side of the accrued expenses (or unearned revenues) account.

Sub-step 2

This amount would be reversed on the same date, so take the same amount and put it on the debit side of the liability account and complete the double entry into the credit side of the expense (or revenue) account).

Sub-step 3

Insert the balance from the current period (from the balance sheet) into the liability account. Remember that in the balancing process for T-accounts, the 'balancing amount' goes on the opposite side of the account to where it will be 'brought down' (in this case, the debit side).

Sub-step 4

The final balance in the liability account is equivalent to the balance-day adjustment that would have been entered on balance day. Using the same figure as the final balance, show the balance-day adjustment on the opposite side of the liability account and complete the double entry into the expense (or revenue) account.

Sub-step 5

Enter the figure for the expense (or revenue) from the income statement that shows the amount that has been closed off to the profit and loss summary account. Remember that, when expenses and revenues are closed off to the profit and loss summary, the amount goes on the opposite side to the nature of the account in order to 'close off' the account (credit expenses and debit revenues).

Sub-step 6

In the expense (or revenue) account, determine the amount of cash that has been paid (or received). This will be the amount that balances the expense or revenue account because it is the missing figure.

The cash figure in the wages and salaries expense account (\$6 000) represents the actual cash paid for wages for the period. As wages do not attract GST, this amount is entered into the cash flow statement in brackets as an outflow in the operating activities category, beside the line 'Payments to employees' [11.12], page 569.

f Calculate payment of interest expense.

Payment of interest is another expense that must be detailed separately in the cash flow statement according to the standard governing the presentation of this report.

In this case, the income statement shows interest expense of \$200. As there are no accrual accounts or prepayment accounts in the balance sheet that indicate a balance-day adjustment for this expense, the amount must be a cash expense. It is therefore written into the cash flow statement in brackets, as an operating outflow next to the line 'Payment of interest expense' [11.12], page 569.

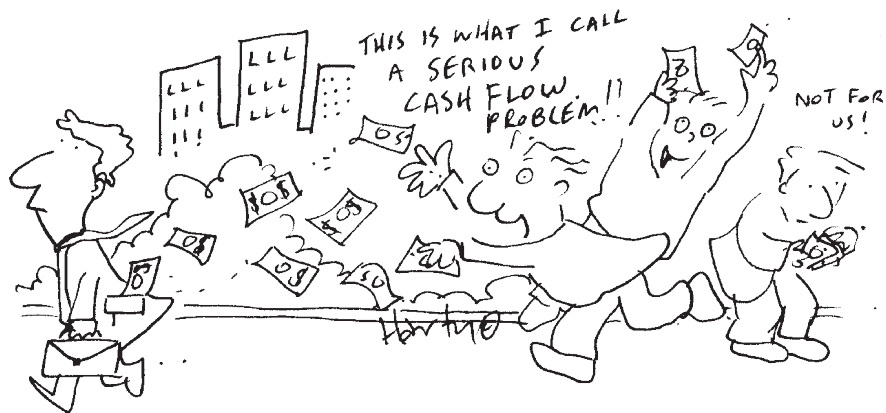
g Calculate cash paid for other operating expenses.

At this point, it is worthwhile to review the expenses in the income statement to determine which expenses have already been accounted for in the cash flow statement. The calculation of 'other expenses' must exclude those expenses already shown separately in the statement (that is, wages and interest). 'Non-cash' expenses such as depreciation are also excluded from the calculation of other expenses, because no cash has moved as a result of these book entries.

Musical Masterpieces Income statement (extract)		
	\$	
Less Other expenses from ordinary activities		
Advertising	280	← Include this expense but requires further adjustment
Depreciation	3 600	← Exclude non-cash item
Wages and salaries	10 300	← Already adjusted and included as separate line
Insurance	1 200	← Include this expense
Printing	250	← Include this expense
Interest expense	200	← Already included as separate line

Therefore, the only expenses to include when calculating outflows of cash for other expenses are advertising, insurance and printing.

Have these expenses required adjustments in the previous accounting period or the current accounting period? A check of the balance sheet reveals that there is a prepayment affecting advertising, and the prepayment has both an opening and a closing balance.



To determine the cash paid for advertising, the six sub-steps shown previously on page 566 will now be applied. (These same sub-steps would apply to accrued revenue, because it is also an asset.)

RE = reversing entry
BDA = balance-day
adjustment
P&L = profit and loss
summary

Prepaid expense – advertising a/c					
1/7/09	Balance Sub-step 1	50	1/7/09	RE Sub-step 2	50
30/06/10	BDA Sub-step 4	420	30/06/10	Balance Sub-step 3	420
		<u>\$470</u>			<u>\$470</u>
Advertising expense a/c					
1/7/09	RE Sub-step 2	50	30/06/10	BDA Sub-step 4	420
30/06/10	Bank Sub-step 6	650	30/06/10	P&L Sub-step 5	280
		<u>\$700</u>			<u>\$700</u>

← The asset account

← The expense account

Sub-step 1

Insert the balance of the asset account from the beginning of the period (from the balance sheet) on the debit side of the prepaid expense (or accrued revenue) account.

Sub-step 2

This amount would be reversed on the same date, so take the same amount and put it into the credit side of the asset account and complete the double entry into the debit side of the expense (or revenue) account).

Sub-step 3

Insert the balance from the current period (from the balance sheet) into the asset account. Remember that in the balancing process for T-accounts, the 'balancing amount' goes on the opposite side of the account to where it will be brought down (in this case, the credit side).

Sub-step 4

The final balance in the liability account is equivalent to the balance-day adjustment that would have been entered on balance day to achieve this final balance. So, using the same figure as the final balance in the asset account, show the balance-day adjustment on the opposite side of the asset account and complete the double entry into the expense (or revenue) account.

Sub-step 5

Enter the figure for the expense (or revenue) from the income statement that shows the amount that has been closed off to the profit and loss summary account. Remember that, when expenses and revenues are closed off to the profit and loss summary, the amount goes on the opposite side to the nature of the account in order to close off the account (credit expenses and debit revenues).

Sub-step 6

In the expense (or revenue) account, determine the amount of cash that has been paid (or received). This amount balances the expense or revenue account because it is the missing figure.

The missing figure in the advertising expense account (\$650) represents the cash movement for advertising.

As there are no other adjustments to be made, the total cash payment for operating expenses is:

Advertising	650
Insurance	1 200
Printing	<u>250</u>
	2 100

plus 10% GST of \$210, which also would have been paid to the suppliers of these goods and services. In addition, the GST actually remitted to the ATO is included in the payment of operating expenses. The total payment of operating expenses is $2\,100 + 210 + 1\,813 = \$4\,123$. (A refund of GST from the ATO would be included as an inflow: 'Other revenue received')

As a result of step 1, the section in the cash flow statement dealing with operating expenses is presented in [11.12].

[11.12]

Musical Masterpieces Cash flow statement for the year ended 30 June 2010 (extract)

	\$	\$
Cash flows from operating activities		
Inflows		
Receipts from customers	39 439	
Interest and dividends received	1 000	
Other revenue received	0	
Outflows		
Payments to suppliers	(23 639)	
Payments to employees	(6 000)	
Payment of interest expense	(200)	
Payment of operating expenses	<u>(4 123)</u>	
Net cash used in operating activities		(6 477)

Step 2



Cash flows from investing activities

In determining the amounts to be included in the cash flow statement arising from investing activities, the balances of the non-current asset accounts need to be compared in the balance sheet from the current period and the previous period.

Purchase of non-current assets

In comparing the non-current asset balances (ignoring the accumulated depreciation balances) for Musical Enterprises, one asset has increased in value: an investment in shares.

Given that the additional information notes that any purchases of assets are cash, we can assume these amounts will affect the cash flow statement and represent outflows under the category 'Cash flows from investing activities'.

The cash outflow for the purchase of assets is determined by subtracting the beginning balance in the balance sheet from its closing balance.

GST is not paid on the purchase of financial products such as shares. The GST paid on the purchase of other assets is dealt with on pages 572–3.

As a result of step 2, the 'Cash flows from investing activities' section in the cash flow statement will appear as shown in [11.13].

[11.13]

Musical Masterpieces
Cash flow statement
for the year ended 30 June 2010 (extract)

	\$	\$
Cash flows from investing activities		
Inflows	0	
Outflows		
Purchase of investment – shares	(12 000)	
Net cash used in investing activities		(12 000)

Step 3



Cash flows from financing activities

In determining the amounts to be included in the cash flow statement arising from financing activities, the non-current liabilities and owner's equity in the balance sheet need to be examined. Business transactions involving finance, such as loans and capital contributions, do not attract GST. Drawings of cash do not attract GST either.

a Proceeds from loans or borrowings

Musical Masterpieces has increased its borrowings by \$17 273 (\$37 273 – \$20 000). This amount represents an inflow of funds and is recorded in the cash flow statement next to the line 'Proceeds from borrowings' [11.14].

b Capital contributions and drawings

The owner's equity section of the balance sheet shows drawings of \$5 000. The additional information stated that all drawings were for cash, so this figure is shown as an outflow in the financing activities section of the cash flow statement. There has been no change in the capital contribution by the owner, which would have been recorded as an inflow in the financing activities section.

As a result of step 3, the section in the cash flow statement dealing with cash flows from financing activities is shown in [11.14].

[11.14]

Musical Masterpieces
Cash flow statement
for the year ended 30 June 2010 (extract)

	\$	\$
Cash flows from financing activities		
Inflows		
Proceeds from borrowings	17 273	
Outflows		
Payment of drawings	(5 000)	
Net cash provided from financing activities		12 273



Step 4



Determine cash balance at end of the period

a Total the net inflows/outflows from steps 1 to 3.

Add the total net cash provided from operating, investing and financing activities and insert this amount next to the line 'Net increase (decrease) in cash held'. In this case:

Net cash used in operating activities	(6 477)
Net cash used in investing activities	(12 000)
Net cash provided from financing activities	12 273
Net increase (decrease) in cash held	<u>(6 750)</u>

b Insert the balance of cash from the beginning of the period.

The closing balance from the last financial period becomes the opening balance for this financial period. The opening balance of cash held is the same as the balance for the bank account from the previous year shown in the balance sheet. In this case, insert \$14 540 against the line 'Add opening cash balance held (less overdraft)' (in this case, the business has no overdraft) **[11.15]**, page 572.

c Calculate the balance of cash at the end of the period (total steps 4a and 4b).

All that is left to do is to add the above two figures to find the cash balance at the end of the period. In this example, $(\$6\,750) + \$14\,540 = \$21\,290$. Insert the amount \$21 290 next to the line 'Cash balance at the end of the period', and the cash flow statement is complete (**[11.15]**).

Remember to check that the final cash balance determined is the same as the balance in the bank (plus any cash equivalents) in the balance sheet.



[11.15]

Musical Masterpieces
Cash flow statement
for the year ended 30 June 2010

	\$	\$
<i>Cash flows from operating activities</i>		
Inflows		
Receipts from customers	39 439	
Interest and dividends received	1 000	
Other revenue received	0	
Outflows		
Payments to suppliers	(23 639)	
Payments to employees	(6 000)	
Payment of interest expense	(200)	
Payment of operating expenses	(4 123)	
Net cash provided from operating activities		6 477
<i>Cash flows from investing activities</i>		
Inflows	0	
Outflows		
Purchase of investment – shares	(12 000)	
Net cash used in investing activities		(12 000)
<i>Cash flows from financing activities</i>		
Inflows		
Funds from borrowings	17 273	
Outflows		
Payment of drawings	(5 000)	
Net cash provided from financing activities		12 273
Net increase (decrease) in cash held		6 750
<i>Add Opening cash balance held (less overdraft)</i>		14 540
<i>Cash balance at the end of the period</i>		\$21 290

► Exercises 11.17 to 11.22, pages 582–90

Cash flow statement with GST – additional consideration

Purchase of non-current asset and GST

GST would be paid on the purchase of an asset (except a financial product – for example, investments, shares, etc.). Therefore, the difference between the two asset amounts in the balance sheet shows the net increase (without GST); to arrive at the cash flow for the purchase of an asset, GST must be added to this amount.

A complication arises in that the purchase of an asset is an investing activity, while the GST component of this purchase is regarded as an operating activity by the accounting standard ASB 1007. Any exercises in this text will only involve asset purchases. Where an asset purchase involves GST, the value of the asset purchase is recorded in the investing outflows, but the GST applicable to the purchase is added to the payment operating expenses – an outflow in the operating activities section of the cash flow statement.

Understandings

- Cash flows are cash and cash equivalents that pass between the business and some external entity.
- The cash flow statement is of equal importance to the income statement and the balance sheet.
- The cash flow statement shows the cash inflows and cash outflows for a business during a given period. It categorises cash flows as operating activities, investing activities and financing activities.
- This statement enhances the balance sheet as it shows what cash changes have occurred from one point in time to another.
- Adjustments must be made for transactions that are not cash flows.



Exercises

★ 11.1 Cash flows

In non-complex cases, the cash flow statement may be prepared from information in one ledger account. Name this account.

★ 11.2 Operating, investing and financing

Categorise the following transactions as operating, investing and financing in accordance with the cash flow statement. State whether each is an inflow or an outflow.

- a** Cash received from customers
- b** Cash interest paid
- c** Cash dividends received
- d** Cash purchase of motor vehicle
- e** Cash paid off loan
- f** Cash received from selling of stock

★ 11.3 Cash flows and non-cash flows

Categorise the following into cash flows and non-cash flows:

- a** purchased furniture for \$5 000 cash
- b** owner withdrew \$600 cash
- c** allowed for \$5 000 depreciation on motor vehicle
- d** bought goods for \$10 000 cash
- e** sold goods for \$505 to R Trent, an accounts receivable
- f** wrote T Young's account of \$254 off as a bad debt
- g** signed an agreement for \$2 million to supply goods to Z Vaas
- h** paid cash of \$30 560 for a new computer system, including installation
- i** exchanged part ownership (market value of \$3 million) for a half-share in Industries Ltd.

★ 11.4 Type of cash flow transaction

From the following, state the type of transaction each is in terms of cash flow reporting:

- a** Sold land and building for \$250 000 and purchased inventories with the proceeds.
- b** Purchased a new plant site for \$2 million, paying \$1.5 million in cash.
- c** Wrote off depreciation to the value of \$400 000.

★ 11.5 Operating, investing and financing activities

Jonathon Tsagris has recorded the following for the year ended 30 June 2010. Classify them into:

- cash inflows or outflows, or non-cash flow transactions
 - operating, investing or financing activities.
- | | |
|---|--|
| a Payment for property, plant and equipment | k Purchase of shares in Advance Bank |
| b Cash drawings | l Commission received – cash |
| c Amounts paid by accounts receivable | m Loan from bank |
| d Depreciation on property, plant and equipment | n Cash advance to an employee |
| e Loan from A Petavrakis | o Payment for purchase of patent |
| f Cash paid to suppliers for goods purchased on credit | p Extra capital contribution from owner |
| g Bad debts written off | q Cash purchases |
| h Gain on sale of property, plant and equipment | r Drawings – inventories |
| i Cash sales | s Cash received for interest on investments |
| j Cash paid to accounts payable | t Accrued commission revenue |
| | u Wages |
| | v Interest expense |
| | w Repayment of loan to bank |

★ 11.6 Cash flow statement from bank a/c

From the information below, complete the cash flow statement for Kate's Cars for the month of September 2010:

Kate's Cars					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Bank a/c					
Sept 1	Capital – K Holley	15 000	Sept 2	Wages	570
3	Cash sales	2 200	3	Repayment of loan	1 000
4	Accounts receivable	1 650	7	Loan to T Louden	2 200
8	Cash sales	1 820	11	Rent	550
10	Commission	630	16	Accounts payable	1 420
15	Rent revenue	1 000	23	Stationery	110
20	Interest revenue	25	25	Drawings	1 000
			27	Furniture	860

Kate's Cars					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
Bank a/c					
Sept 1	Capital – K Holley		15 000		15 000 Dr
2	Wages			570	14 430 Dr
3	Cash sales		2 200		16 630 Dr
	Repayment of loan			1 000	15 630 Dr
4	Accounts receivable		1 650		17 280 Dr
7	Loan to T Louden			2 200	15 080 Dr
8	Cash sales		1 820		16 900 Dr
10	Commission		630		17 530 Dr
11	Rent			550	16 980 Dr
15	Rent revenue		1 000		17 980 Dr
16	Accounts payable			1 420	16 560 Dr
20	Interest revenue		25		16 585 Dr
23	Stationery			110	16 475 Dr
25	Drawings			1 000	15 475 Dr
27	Furniture			860	14 615 Dr

★ 11.7 Structure – operating

From the following information, complete the 'Cash flows from operating activities' section of the cash flow statement for the period ended 30 June 2010:

	2010 \$000
Dividend received	15 600
Payments to suppliers and employees	3 200
Proceeds from sale of equipment	23 500
Interest received	45 200
Receipts from customers	99 862
Interest paid	23 610
Proceeds from borrowings	25 100

★ 11.8 Structure – investing

From the following information, complete the 'Cash flows from investing activities' section of the cash flow statement for the period ended 30 June 2010:

	2010 \$000
Proceeds from sale of equipment	\$3 200
Payment for property, plant and equipment	36 900
Payment for equipment	369 024
Receipts from customers	231 021
Repayments of borrowings	6 100

★ 11.9 Structure – financing

From the following information, complete the 'Cash flows from financing activities' section of the cash flow statement for the period ended 30 June 2010:

	2010 \$000
Interest earned	3 650
Receipts from customers	32 650
Payment for equipment	6 920
Payment to suppliers	12 356
Repayments of borrowings	100
Purchase of shares	1 350
Interest paid	300
Capital contributed	3 690
Proceeds from borrowings	5 100

★ 11.10 Structure – cash flow statement

From the information below, complete a cash flow statement for A Ringlestein for the month of June 2010:

A Ringlestein					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
				Bank a/c	
Jun 1	Balance	6 500	Jun 6	Electricity	400
	Accounts receivable	5 500	8	Accounts payable	10 200
4	Loan from B Pippas	3 000	10	Rates	800
9	Rent revenue	4 000	11	Equipment	2 000
13	Capital, A Ringlestein	10 000	13	Accounts payable	4 800
22	Accounts receivable	12 600	25	Loan, B Pippas	100
27	Interest revenue	500	28	Wages	1 000

★★ 11.11 Structure of cash flow statement

From the information below, complete a cash flow statement for G Gowdie:

G Gowdie					
Date	Particulars	Post ref	Debit \$	Credit \$	Balance \$
2010					
	Bank a/c				
Aug 1	Balance				15 260 Dr
	Rent revenue		2 000		17 260 Dr
2	Accounts payable			31 000	13 740 Cr
4	Sales		4 000		9 740 Cr
5	Drawings			1 000	10 740 Cr
6	Sales		4 000		6 740 Cr
13	Accounts receivable		20 000		13 260 Dr
	Motor vehicle			21 000	7 740 Cr
16	Commission		6 000		1 740 Cr
	Purchases			500	2 240 Cr
19	Rent revenue		2 000		240 Cr
	Accounts payable			9 000	9 240 Cr
22	Sales		4 170		5 070 Cr
	Mortgage			4 000	9 070 Cr
27	Wages			6 000	15 070 Cr
31	Accounts receivable		35 120		20 050 Dr

★ 11.12 Cash flow statement

From the following income statement and comparative balance sheet, prepare a cash flow statement for Dobell's Cleaning Services for the year ended 30 June 2010.

Dobell's Cleaning Services		
Income statement for the year ended 30 June 2010		
	\$	\$
Sales		
Credit sales		23 000
Less Cost of goods sold		<u>9 600</u>
GROSS PROFIT		13 400
Add Other revenue from ordinary activities		
Commission revenue		<u>300</u>
		13 700
Less Other expenses from ordinary activities		
Telephone	430	
Insurance	500	
Wages	3 600	
Rates	400	
Interest	120	
Advertising	500	<u>5 550</u>
NET PROFIT/(LOSS)		<u><u>\$8 150</u></u>

Dobell's Cleaning Services		
Balance sheet as at 30 June		
	2010	2009
	\$	\$
Assets		
Bank	4 875	3 500
Accounts receivable control	7 582	4 000
Inventories control	5 493	6 500
Motor vehicles	<u>17 100</u>	<u>12 000</u>
	35 050	26 000
Less Liabilities		
Accounts payable control	5 200	14 300
Bank loans (mature July 2014)	<u>10 000</u>	<u>0</u>
	15 200	14 300
NET ASSETS	<u><u>\$19 850</u></u>	<u><u>\$11 700</u></u>
Owner's equity		
D Dobell – capital	11 700	10 000
Net profit/(net loss)	<u>\$8 150</u>	<u>\$1 700</u>
	<u><u>\$19 850</u></u>	<u><u>\$11 700</u></u>

★★ 11.13 Cash flow statement

From the following income statement and comparative balance sheet, prepare a cash flow statement for Nicholas Sherwin for the period ended 30 June 2010.

Nicholas Sherwin
Income statement for the year ended 30 June 2010

	\$	\$
Sales		45 000
<i>Less</i> Cost of goods sold		<u>28 400</u>
GROSS PROFIT		16 600
Add Other revenue from ordinary activities		
Commission revenue	<u>660</u>	<u>660</u>
		17 260
Less Other expenses from ordinary activities		
Rates	1 200	
Insurance	2 400	
Wages	15 400	
Bad debts expense	300	
Interest expense	100	
		<u>19 400</u>
NET PROFIT/(LOSS)		<u><u>(\$2 140)</u></u>

Nicholas Sherwin
Balance sheet as at 30 June

	2010	2009
	\$	\$
Owner's equity		
Capital	51 250	46 250
Add Net profit (loss)	(2 140)	3 500
Add Additional capital	6 000	1 500
Less Drawings	<u>(1 650)</u>	<u>0</u>
	<u>\$53 460</u>	<u>\$51 250</u>
Represented by:		
Assets		
Bank	2 540	8 700
Accounts receivable control	23 400	8 500
Inventories control	3 200	6 550
Pre-paid expense – insurance	520	0
Equipment	6 000	5 000
Government bonds	5 000	0
Building	<u>85 000</u>	<u>75 000</u>
	125 660	103 750
Less Liabilities		
Accounts payable control	11 590	2 500
Accrued expenses – rates	130	0
Accrued expenses – wages	480	0
Mortgage – building	<u>60 000</u>	<u>50 000</u>
	<u>\$53 460</u>	<u>\$51 250</u>

Additional information:

- All sales and purchases of inventories were on credit. All other purchases, drawings or capital contributions were for cash.

★★ 11.14 Cash flow statement

From the following income statement and comparative balance sheet, prepare a cash flow statement for Peter Macbeth for the period ended 30 June 2010.

Peter Macbeth Income statement for the year ended 30 June 2010		
	\$	\$
Sales		21 500
<i>Less</i> Cost of goods sold		9 800
GROSS PROFIT		11 700
Add Other revenue from ordinary activities		
Interest revenue	1 250	1 250
		12 950
Less Other expenses from ordinary activities		
Electricity	1 200	
Advertising	1 500	
Wages and salaries	8 700	
Bad debts expense	160	
Interest expense	350	
		11 910
NET PROFIT/(LOSS)		\$1 040

Peter Macbeth Balance sheet as at 30 June		
	2010 \$	2009 \$
Owner's equity		
Capital	33 730	28 000
Add Net profit	1 040	5 980
Add Additional capital	10 000	0
Less Drawings	(650)	(250)
	\$44 120	\$33 730
Represented by:		
Assets		
Bank	4 640	980
Accounts receivable control	1 660	2 350
Inventories control	950	3 100
Prepaid expense – advertising	150	0
Motor vehicle	12 500	12 500
Office equipment	16 000	10 200
Investment bonds	45 000	40 000
	80 900	69 130
Less Liabilities		
Accounts payable control	4 980	3 400
Accrued expenses – interest	200	0
Accrued expenses – wages	600	0
Mortgage	31 000	32 000
	\$44 120	\$33 730

Additional information:

- All sales and purchases were on credit. All other purchases, drawings and capital contributions were for cash.

★★ 11.15 Cash flow statement and notes

From the following income statement and comparative balance sheet, prepare a cash flow statement for Aishlin's Pet Shop Supplies for the period ended 30 June 2010.

Aishlin's Pet Shop Supplies
Income statement for the year ended 30 June 2010

	\$	\$
Sales		47 400
<i>Less</i> Cost of goods sold		17 890
GROSS PROFIT		29 510
Add Other revenue from ordinary activities		
Interest revenue	154	154
		29 664
Less Other expenses from ordinary activities		
Rent	1 250	
Telephone	360	
Wages	14 000	
Bad debts expense	132	
Interest expense	545	
		16 287
NET PROFIT/(LOSS)		\$13 377

Aishlin's Pet Shop Supplies
Balance sheet as at 30 June

	2010	2009
	\$	\$
Owner's equity		
Capital	13 440	9 000
Add Net profit	13 377	440
Add Additional capital	0	6 500
Less Drawings	(3 500)	(2 500)
	\$23 317	\$13 440
Represented by:		
Assets		
Bank	1 212	2 600
Deposits at call	5 000	0
Accounts receivable control	410	560
Inventories control	6 510	5 600
Accrued revenue – interest	100	0
Prepaid expense – rent	140	0
Shop fittings	13 280	11 280
Equipment	10 800	6 800
Loan to C Small	2 000	0
	39 452	26 840
Less Liabilities		
Accounts payable control	4 900	3 400
Accrued expenses – interest	35	0
Accrued expenses – wages	1 200	0
Loan from Aussieloans Bank	10 000	10 000
	\$23 317	\$13 440

Additional information:

- All sales and purchases were on credit. All other purchases, drawings and capital contributions were for cash.

★★ 11.16 Cash flow statement

From the following income statement and comparative balance sheet, prepare a cash flow statement for Joshua Atkinson for the period ended 30 June 2010.

Joshua Atkinson
Income statement for the year ended 30 June 2010

	\$	\$
Sales		15 000
<i>Less</i> Cost of goods sold		<u>6 400</u>
GROSS PROFIT		8 600
Add Other revenue from ordinary activities		
Interest revenue	<u>41</u>	<u>41</u>
		8 641
Less Other expenses from ordinary activities		
Rent	1 250	
Telephone	120	
Wages	7 000	
Bad debts expense	155	
Interest expense	400	
		<u>8 925</u>
NET PROFIT/(LOSS)		<u><u>(\$284)</u></u>

Joshua Atkinson
Balance sheet as at 30 June

	2010	2009
	\$	\$
Owner's equity		
Capital	7 820	8 670
Add Net profit (loss)	(284)	(2 100)
Add Additional capital	<u>2 500</u>	<u>1 250</u>
	<u>\$10 036</u>	<u>\$7 820</u>
Represented by:		
Assets		
Bank	(334)	(1 260)
Accounts receivable control	255	400
Inventories control	1 300	1 250
Accrued revenue – interest	20	0
Prepaid expense – rent	60	0
Computer equipment	6 800	5 000
Motor vehicle	16 000	8 000
Aussie bonds	<u>1 500</u>	<u>0</u>
	25 601	13 390
Less Liabilities		
Accounts payable control	4 900	570
Accrued expenses – interest	165	0
Accrued expenses – wages	500	0
Loan from AXZ Bank	<u>10 000</u>	<u>5 000</u>
	<u>\$10 036</u>	<u>\$7 820</u>

Additional information:

- All sales and purchases were on credit. All other purchases, drawings and capital contributions were for cash.

★★★ 11.17 Cash flow statement

From the following financial records of S Quinn, prepare a cash flow statement as at 30 June 2010.

S Quinn Income statement for the year ended 30 June 2010		
	\$	\$
Sales		12 129
<i>Less</i> Cost of goods sold		31 776
GROSS LOSS		(19 647)
Add Other revenue from ordinary activities		
Commission revenue	230	
Rent revenue	350	580
Less Other expenses from ordinary activities		(19 067)
Selling and distribution	328	
General and administration	320	
Insurance	600	
Interest	50	
Depreciation on delivery vehicle	300	
Depreciation on furniture	500	
Wages	6 700	8 798
NET LOSS		(\$27 865)

S Quinn Balance sheet as at 30 June		
	2010 \$	2009 \$
Assets		
Bank	—	7 000
Deposits on call	2 500	2 000
Accounts receivable control	2 669	500
Inventories control	5 933	32 000
Prepaid insurance	200	500
Accrued commission	210	—
Delivery vehicle	14 000	14 000
Accumulated depreciation – delivery vehicle	(300)	—
Furniture	36 000	2 800
Accumulated depreciation – furniture	(2 300)	(1 800)
Building	75 000	75 000
	\$133 912	\$132 000
Less Liabilities		
Bank overdraft	28 218	—
Accounts payable control	1 459	400
Unearned rent revenue	250	—
Accrued wages expenses	1 300	600
Bank loan (maturing November 2013)	24 000	24 000
	55 227	25 000
Owner's equity		
Capital	107 000	54 600
Net profit (loss)	(27 865)	52 400
Less Drawings	(450)	—
	\$133 912	\$132 000

Additional information:

- Furniture bought was purchased for cash.
- The drawings in 2009/2010 are all for cash.
- Inventories were purchased on credit.

★★★ 11.18 Cash flow statement with GST

From the following income statement and comparative balance sheet, prepare a cash flow statement for Ainsley Watt for the period ended 30 June 2010. Reconstruct the following accounts:

- Accounts receivable
- Accounts payable
- Inventories
- Any revenue or expense accounts that need to be adjusted.

Ainsley Watt Income statement for the year ended 30 June 2010		
	\$	\$
Revenues		
Sales – cash	245 000	
Sales – credit	61 480	
		306 480
Less Sales returns – credit		480
		306 000
Less Cost of good sold		166 500
		139 500
Add Other revenue from ordinary activities		
Dividend revenue	450	
Interest revenue	680	
Commission revenue	750	
		1 880
		141 380
Less Other expenses from ordinary activities		
Advertising	6 580	
Wages	65 520	
Insurance	7 860	
Bad debts	3 760	
Interest on mortgage and loans	2 685	
Depreciation – delivery vehicles	5 000	
Depreciation – buildings	13 104	
		104 509
NET PROFIT/(LOSS)		\$36 871

Ainsley Watt
Balance sheet as at 30 June

	2010	2009
	\$	\$
Assets		
Bank	0	3 620
Cash management fund	3 100	6 500
Accounts receivable	28 500	24 600
Prepaid expense – insurance	300	150
Accrued revenues – interest	680	0
Inventories	145 200	123 500
Delivery vehicle (net)	40 000	45 000
Buildings (net)	100 000	113 104
Government bonds	30 000	20 000
	\$347 780	\$336 474
Less Liabilities		
Bank overdraft	11 320	0
GST clearing	580	2 000
Accounts payable	24 600	16 000
Accrued expense – wages	420	900
Mortgage on buildings	90 000	95 000
Loan – delivery vehicle	38 000	40 000
	164 920	153 900
NET ASSETS	\$182 860	\$182 574
Owner's equity		
Capital	182 574	140 000
Add Net profit/Less Net loss	36 871	46 574
Additional capital	0	10 000
	219 445	196 574
Less Drawings	36 585	14 000
TOTAL OWNER'S EQUITY	\$182 860	\$182 574

Additional information:

- All inventory purchases were on credit.
- All drawings were for cash, as were any asset purchases.
- GST remitted to the ATO during the period was \$11 440.

★★★ 11.19 Cash flow statement with GST

From the following income statement and comparative balance sheet, prepare a cash flow statement for A Beebe for the period ended 30 June 2010. Reconstruct the following accounts:

- Accounts receivable control
- Accounts payable control
- Inventories control
- Any revenue or expense accounts that need adjustment.

A Beebe Income statement for the year ended 30 June 2010

	\$	\$
Revenues		
Sales – cash	285 000	
Sales – credit	350 000	
		635 000
<i>Less Cost of good sold</i>		222 500
		412 500
Add Other revenue from ordinary activities		
Interest revenue	1 130	
Commission revenue	750	
		1 880
		414 380
Less Other expenses from ordinary activities		
Cleaning	15 600	
Wages	196 554	
Insurance	17 860	
Bad debts	12 540	
Interest on mortgage	9 685	
Depreciation – buildings	10 000	262 239
NET PROFIT/(LOSS)		\$152 141

A Beebe Balance sheet as at 30 June

	2010 \$	2009 \$
Assets		
Bank	0	3 620
Deposit on call	3 100	500
Accounts receivable	28 500	24 600
Prepaid expense – insurance	980	650
Accrued revenues – interest revenue	440	336
Inventories	69 800	145 210
Buildings (net of accum. depreciation)	215 000	225 000
Shares in ZYX Ltd	334 136	120 000
	\$651 956	\$519 916
Less Liabilities		
Bank overdraft	11 900	0
GST clearing	2 254	3 690
Accounts payable	21 500	35 000
Accrued expense – wages	420	900
Mortgage on buildings	130 000	135 000
	166 074	174 590
NET ASSETS	\$485 882	\$345 326

Owner's equity		
Capital	345 326	302 752
Add Net profit/Less Net loss	152 141	46 574
Additional capital	25 000	10 000
	<u>522 467</u>	<u>359 326</u>
Less Drawings	36 585	14 000
TOTAL OWNER'S EQUITY	<u>\$485 882</u>	<u>\$345 326</u>

Additional information:

- All inventory purchases were on credit
- All drawings were for cash, as were any asset purchases.
- GST remitted to the ATO during the period was \$45 669.

★★★ 11.20 Cash flow statement with GST

From the following income statement and comparative balance sheet, prepare a cash flow statement for Lucinda Fraser for the period ended 30 June 2010. Reconstruct the following accounts:

- Accounts receivable control
- Accounts payable control
- Inventories control
- Any revenue or expense accounts that need adjustment.

Lucinda Fraser			
Income statement for the year ended 30 June 2010			
	\$	\$	\$
Sales		550 000	
Less Sales returns (cash)		<u>5 000</u>	545 000
Less Cost of goods sold			
Less Inventories (30/6/09)			<u>99 000</u>
GROSS PROFIT			446 000
Add Other revenue from ordinary activities			
Interest revenue		2 700	
Commission revenue		12 000	
Dividends received		<u>1 200</u>	15 900
			<u>461 900</u>
Less Other expenses from ordinary activities			
Subscriptions		5 200	
Printing		48 000	
Wages		185 000	
Legal fees		50 800	
Postage expense		1 000	
Depreciation – equipment		14 000	
Depreciation – plant		30 000	
Amortisation – patent		1 000	
Bad debts		15 000	
Interest expense		<u>11 000</u>	361 000
NET PROFIT/(LOSS)			<u>\$100 900</u>

Lucinda Fraser
Balance sheet as at 30 June

ASSETS	2010	2009
Current assets	\$	\$
Cash at bank	5 900	0
Cash management account	30 000	0
Accounts receivable	94 000	138 000
Inventory	52 000	60 000
Prepaid expense – printing	2 000	5 000
Accrued revenue – interest revenue	600	1 000
Non-current assets		
Equipment	100 000	30 000
Less Accumulated depreciation – equipment	(20 000)	(6 000)
Plant	150 000	150 000
Less Accumulated depreciation – plant	(75 000)	(45 000)
Loan to Goodbuy Co.	45 000	45 000
Patent	40 000	40 000
Less Accumulated amortisation – patent	(9 000)	(8 000)
	\$415 500	\$410 000
NET ASSETS		
LESS LIABILITIES		
Current liabilities		
Bank overdraft	0	42 000
GST clearing	12 600	4 500
Accounts payable	20 000	70 000
Accrued expenses – wages	35 000	19 000
Non-current liabilities		
Bank loan	45 600	60 000
Owner's equity		
Capital	214 500	177 000
Net profit/loss	100 900	92 000
Drawings	(13 100)	(54 500)
TOTAL LIABILITIES AND OWNER'S EQUITY	\$415 500	\$410 000

Additional information:

- GST remitted to the ATO during the period was \$19 800.
- All drawings were for cash, as were asset purchases.

★★★ 11.21 Cash flow statement with GST

From the following financial records of G Wilson, complete a cash flow statement for the year ended 30 June 2010:

G Wilson Income statement for the year ended 30 June 2010

	\$	\$
Sales		150 000
<i>Less</i> Cost of goods sold		56 000
		<u>94 000</u>
GROSS PROFIT		
<i>Less</i> Other expenses from ordinary activities		
Selling and distribution	14 800	
General and administration	19 800	
Interest	550	
Depreciation on motor vehicle	3 000	
Depreciation on furniture	4 000	
Wages	7 000	
		<u>49 150</u>
NET PROFIT		<u><u>\$44 850</u></u>

G Wilson Balance sheet as at 30 June

	2010 \$	2009 \$
Current assets		
Bank	0	59 100
Inventories control	32 000	28 000
Accounts receivable control	185 000	60 000
<i>Less</i> Current liabilities		
Bank overdraft	91 747	0
Accounts payable control	70 000	70 000
Accrued general and administration expenses	3 200	6 500
GST clearing	2 203	2 600
	<u>49 850</u>	<u>68 000</u>
WORKING CAPITAL		
<i>Add</i> Non-current assets		
Motor vehicle	45 000	45 000
<i>Less</i> Accumulated depreciation	-6 500	-3 500
Furniture	50 000	50 000
<i>Less</i> Accumulated depreciation	-20 000	-16 000
Equipment	200 000	0
	<u>200 000</u>	<u>0</u>
NET ASSETS	<u><u>\$318 350</u></u>	<u><u>\$143 500</u></u>
Represented by Owner's equity		
Capital	143 500	121 500
<i>Add</i> Additional capital contributions	130 000	0
<i>Add</i> Net profit	44 850	22 000
	<u>218 350</u>	<u>143 500</u>
TOTAL OWNER'S EQUITY	<u><u>\$318 350</u></u>	<u><u>\$143 500</u></u>

Additional information:

- All purchases of non-current assets were for cash.
- Capital contributions were for cash.
- All sales and purchases of inventories are on credit.
- GST refund received was \$14 393.

★★★11.22 Cash flow statement with GST

From the following information, complete the cash flow statement for G L Yellowstone for the year ended 30 June 2010:

G L Yellowstone Income statement for the year ended 30 June 2010		
	\$	\$
Sales – Cash	400 000	
– Credit	510 000	910 000
<i>Less</i> Cost of goods sold		368 000
GROSS PROFIT		542 000
Add Other revenue from ordinary activities		
Commission revenue		60 000
		602 000
Less Other expenses from ordinary activities		
Selling and distribution	127 200	
General and administration	174 510	
Finance	5 000	306 710
NET OPERATING PROFIT		\$295 290

G L Yellowstone Balance sheet as at 30 June		
	2010 \$	2009 \$
Current assets		
Bank	249 670	0
Inventories control	162 000	140 000
Accounts receivable control	96 050	92 000
Less Current liabilities		
Bank overdraft	0	48 210
Accounts payable control	52 000	60 000
Accrued office wages	4 900	6 100
GST clearing	2 630	1 790
WORKING CAPITAL	448 190	115 900
Add Non-current assets		
Property, plant and equipment		
Equipment	206 000	206 000
<i>Less</i> Accumulated depreciation	(20 000)	(18 000)
Investments		
Shares – Colemans	77 880	77 880
Intangibles		
Goodwill	40 000	40 000
Accumulated amortisation	(5 000)	0
	747 070	421 780
Less Non-current liabilities		
Mortgage on land and buildings	110 900	120 900
Loan ABC Bank (matures July 2014)	250 000	210 000
NET ASSETS	\$386 170	\$90 880
Represented by Owner's equity		
Capital	90 880	103 000
Add Net profit	295 290	(11 090)
<i>Less</i> Drawings	0	(1 030)
TOTAL OWNER'S EQUITY	\$386 170	\$90 880

Additional information:

- All drawings are for cash.
- Wages for the year ended 30 June 2010 have been included in the above reports. Sales wages are for \$40 000 and office wages are for \$38 800.
- \$550 was written off accounts receivable accounts. (This amount includes GST.)
- Finance expense is for \$5 000 interest.
- All purchases of inventories were made on credit.
- GST remitted to the ATO for the period was \$35 569.

RD3

Financial reports and ratios

Financial reports and their limitations

- Purpose of financial reports
- Users of financial reports and ratio analysis
- Types of financial reports
- Presentation of comparative financial reports
- Limitations of end-of-period reports

Analysis of end-of-period financial reports

- Analytical techniques
- Ratio analysis
- Performing the analysis with spreadsheets
- Applying other analytical techniques
- Limitations of ratios as analytical tools

Communicating recommendations based on financial reports

- Interpretation of the analysis
- Strategy for interpreting financial reports
- Communicating the results of analysis and interpretation

12

Chapter

Part 1 – Financial reports and their limitations

Already know

- The accounting process from source documents to end-of-period reports
- How to prepare the financial reports (classified income statement, balance sheet and cash flow statement)

Need to know

- Limitations of the income statement, balance sheet and various methods of analysis
- Calculation of appropriate ratios
- Analysis and interpretation of reports
- The process of making decisions and recommendations

Using this knowledge

- *Provides information for decision-making* through analysing the financial information presented in the end-of-period reports, keeping in mind the limitations of financial reports when providing recommendations

ACCOUNTING VOCABULARY

Accounting assumptions
Comparative financial reports
Financial reports

General-purpose reports
Ratio analysis
Special-purpose reports

Learning objectives

After completing this section, you should be able to:

- 1 state the purpose, users and types of financial reports
- 2 understand an alternative presentation for end-of-period reports
- 3 understand that the end-of-period reports have limitations
- 4 understand that there are specific limitations of the income statement and balance sheet.

Purpose of financial reports

Learning objective 1

The preparation of financial reports is one of the principal ways in which the objectives of accounting are demonstrated – to provide information for decision-making.



The **function of financial reports** is to communicate information to users in order to facilitate the decision-making process.

Users rely on the information in reports for making financial decisions. Therefore, the reports must be based on the accounting assumptions, and the information contained in them must have the qualitative characteristics expected of financial reports. The fundamental concepts on which reports are based and the qualities of the information contained in the reports were discussed in detail in chapter 10.

See chapter 10 for more on these concepts.

Information about the financial performance and financial position of the business are available in the end-of-period reports. Additional information about financing and investing is generally available in the cash flow statement. Information about compliance with external entity requirements is generally available in the notes attached to reports. These notes are supplementary to the reports and should be read in conjunction with them. They disclose the basis of the financial reports and the accounting methods used to determine the figures in the reports.

Users of financial reports and ratio analysis

Users of financial reports are both internal and external to the enterprise. Although the reports of sole traders are more limited in their exposure to outside parties, lenders and the Australian Taxation Office would be interested external users, and internal management would be interested in them from a management and ownership perspective. The reports of companies, on the other hand, because of their public availability in print and through electronic sources such as the Internet, are widely available to investors, analysts and creditors. The competitors of a company would be keen users of the financial reports of an enterprise as well.

Table [12.1] indicates the various parties interested in financial reports and the possible decisions they might have to consider.

[12.1]

Category	Interested party	Factors to consider	Decision/s to be made
Resource providers	Investors	Return on investment. Changes in market prices of share (companies).	Sell, retain or increase their investment.
	Lenders	Short-term liquidity and long-term financial solvency. Will the principal (amount lent) be repaid with interest?	Provide, withdraw or refuse future loan requests.
	Suppliers	Ability to generate cash to sustain operations and meet debt obligations when due.	Stop, continue or expand credit facility.
	Employees	The financial wellbeing of the entity (profitability, financial condition and cash-generating ability).	Look for other employment or remain with the present employer.
Recipients of goods and services	Customers	Prospects as a short- and long-term provider of goods and services. Will the enterprise be able to honour any guarantees given?	Look for other providers or remain with the present supplier.
External parties	Regulatory agencies	Does the entity comply with all legal requirements?	Does any issue require legal action?
	Competitors	How do the enterprise's prices and costs compare with other operators?	Percentage of the available market.

Liquidity – an enterprise's ability to meet its short-term commitments from its current assets.

Solvency – having access to sufficient funds to meet long-term financial commitments.



Types of financial reports

Accounting reports can be categorised as general- or special-purpose financial reports. This chapter will focus on general-purpose reports.

The two classifications of reports stem from two distinct areas of accounting: financial accounting and managerial accounting. While financial accounting deals with external (published) reports and compliance with various statutory requirements, managerial accounting focuses on the internal reports required by management for decision-making about the business. Therefore, general-purpose reports are the external reports (which would be published if the business were a company), while special-purpose reports are internal reports which differ according to the firm producing them as they focus on the needs of each individual business. Table [12.2] displays the various types of financial reports, general- and special-purpose.

[12.2]

Type of financial report	Examples of reports
General-purpose	Income statement Balance sheet Cash flow statement
Special-purpose	Budgets and performance analysis reports Sales reports Ageing of accounts receivable Inventory turnover Production schedules Current level and structure of asset holdings Schedule of borrowings Cost-benefit analysis

Presentation of comparative financial reports

Learning objective 2

The format of reports used for analysis differs slightly from that used for the end-of-period reports. In order to make valid judgments on the profitability, financial position and cash flow of an entity, comparative reports are presented. Generally, the reports indicate the current year's figures and, usually to the right of these figures, the previous year's figures. In order to present the information from a number of years and to facilitate analysis, end-of-period reports are often consolidated into one column for each year. This allows the differences between the years to be shown in both dollar values and as percentage changes.

Review & practice



- a **What** objective of accounting is fulfilled by the preparation of end-of-period reports?
- b **Who** are the users of financial reports and ratio analysis?
- c **What** is the difference between general-purpose and special-purpose financial reports?



- d Why** is working capital shown in the balance sheet?
- e What** is the link between the income statement and the balance sheet?

Limitations of end-of-period reports

Learning objective 3 Before information from financial reports can be assessed for the purpose of decision-making, the limitations surrounding the financial data must be presented. While one major factor is inflation, which affects all values in the comparative end-of-period reports, a number of assumptions (and some qualitative characteristics) also create limitations in financial reports.

Assumptions and qualitative characteristics are covered in detail in chapter 10.

Accounting assumptions

Just as users of accounting information accept the assumptions on which reports are based, they must also accept and acknowledge the limitations that are inherent in the reports produced. A fundamental assumption – the accounting period assumption – requires a number of calculations to be made in order to produce reports at balance day. Calculations for items such as doubtful debts and depreciation require a degree of estimation and opinion that is subjective to some extent. Such calculations may compromise the qualities of the information – in particular, the reliability and comparability of the information.

The adoption of the historical cost assumption is also of some concern in light of the qualities of relevance and understandability. Assets may be recorded at their historical cost, but the true value of these assets may be very different.

Limitations specific to the income statement

Learning objective 4 The reported profit in an income statement is an estimate of the true profit because of the many items in this statement that are subject to estimation and/or opinion. Some expenses are recorded in *current dollar values*, whereas other expenses may be valued in terms of dollars at different points in time. For example, wages and salaries are recorded in current values, but depreciation may represent dollar values of previous periods. In times of rising prices, inflation is the principal cause of discrepancy in values between different periods.

When the dollar value in the current period is compared with the dollar value in previous periods, the reports may reveal more about inflation than the financial position of the entity.

The values given for the following expenses have limitations due to the subjective basis on which they are calculated:

- depreciation
- doubtful debts
- cost of goods sold (depending on the method of valuation used).

Depreciation Depreciation is calculated in order to estimate the cost of a non-current asset that should be allocated to the accounting periods in which it is used to generate revenue. This is a direct result of the adoption of the matching principle in which revenues earned in a period are matched with expenses incurred. The impetus for the matching of revenues and expenses is the adoption of the accounting period assumption.

The valuation of depreciation expense is subjective – it depends on the method used. Recall from chapter 6 that two methods are generally used for taxation purposes in Australia:

- straight line (prime cost) method
- reducing balance method.

Generally, one of these two methods will be used due to taxation requirements, but an alternative method of accounting for depreciation may in fact give a better matching of revenues and expenses. For example, the reducing balance method may be chosen to depreciate a machine according to the taxation guidelines because it allows a maximum percentage of the cost to be written off for tax purposes. However, the units of use method might give a more accurate accounting profit. Many professional accounting systems allow for both to be recorded and reported.

Doubtful debts The valuation for doubtful debts is subjective and dependent on two general factors:

- perception of the current economic climate
- effectiveness of credit policy.

The true values of the debts that will be bad in the following accounting period (but are currently included in the balance of the accounts receivable) will not be known until a later date. This figure is therefore using verifiable historical records of accounts receivable derived (such as an aged analysis of accounts receivable) together with a perception of whether or not the economic climate is favourable (less likely to cause business failure) or unfavourable (likely to see some businesses fail).

Cost of goods sold The valuation of the cost of goods sold is dependent on the choice of costing method that has been made. Inventory may be valued using one of the following methods:

- first-in-first-out
- weighted average cost.
- actual costing

Gross profit figures will vary based on the costing method chosen.

Limitations specific to the balance sheet

The balance sheet does not reveal the real net worth of a business. This is because assets are usually recorded at their historical cost, rather than at current or realisable value. They are also subject to estimation and/or opinion, especially when the values of items such as inventories, provision for doubtful debts and accumulated depreciation are calculated.

Asset valuation

Three of the principal methods of valuing assets are:

- *current cost* – assets are shown as the amount of cash that would have to be paid if the same or an equivalent asset was acquired at a given point in time
- *realisable (settlement) value* – assets are shown at the amount of cash that could currently be obtained by selling the asset in an orderly disposal
- *historical cost* – assets are recorded at the amount of cash (or cash equivalent) paid for them.

The main reason for accountants adopting the historical cost assumption is that it allows all record-keeping to be carried out using values that can be verified

Other factors are considered in chapter 4.

by documentation produced at the original time of purchase. This avoids any subjectivity or 'guesstimates' in accounting reports and ensures that all figures reflect objective values. However, these values may not reflect the true worth of the asset, so the balance sheet may understate or overstate asset values.

Other factors

Further limitations specific to the balance sheet include:

Accumulated depreciation Just as depreciation expense limits the income statement through the degree of subjectivity involved in its calculation, so too is the accumulated depreciation in the balance sheet affected by this subjectivity.

Investments Historical cost and inflation have an impact on the values determined for investments in the balance sheet. Some investments are recorded at net market value, while others are recorded at cost, whichever is the lower. Therefore, recognition is given to 'unrealised losses' but not to 'unrealised gains'. For example, if shares had been purchased for \$15 000 but have a net market value of \$10 000, then the value to be recorded is \$10 000 – the lower of the two values. This means that 'unrealised losses' (not an actual loss because the investment has not been sold) are 'recognised', or taken into account. If the investment had appreciated in value and its net market value was \$20 000, the investment would still be recorded at its cost of \$10 000. This is an example of the conservatism of valuations given by accountants.

Provision for doubtful debts The calculation of doubtful debts affects the valuation of the provision for doubtful debts in the balance sheet. The value of the provision for doubtful debts, which in turn affects the final value of accounts receivable, is not an objective value because it is subject to the estimation of a doubtful debts figure.

Inventories As discussed earlier in this chapter, the final valuation of inventories depends on the costing method used. Australian accounting standards require inventories to be valued at the lower of cost or net realisable value. The true net realisable value of an asset is not known until it is realised, and this is not done in order to determine a value for the financial reports. Estimation is used instead.

Current liabilities There is a degree of uncertainty in the valuation of current liabilities such as accounts payable due to the fact that discount may be applicable. Discounted values are not used in the balance sheet, although they are more certain than most estimations used.

Table [12.3] brings together some of these limitations of the income statement and balance sheet.

[12.3]

Focus	Account	Report	Assumption or characteristic	Limitation	Explanation
Current assets	Accounts receivable	Balance sheet	Matching principle Timeliness	Subjective	Net book values of accounts receivable are dependent on the estimated doubtful debts figure.
	Inventories	Income statement Balance sheet	Accounting period	An estimate	Inventory valuations can be based on various methods, giving different profit figures.



Focus	Account	Report	Assumption or characteristic	Limitation	Explanation
Current liabilities	Accounts payable	Balance sheet	Accounting period	A degree of uncertainty	Discount may be applicable, although its value is more certain than most.
Expenses	Depreciation	Income statement	Accounting period Matching principle Timeliness	An estimate	Depreciation valuations can be based on various methods that give different profit figures.
	Doubtful debts	Income statement	Accounting period Matching principle	Subjective	Doubtful debts is dependent on the perception of current economic climate and the effectiveness of credit policy.
	Current expenses versus depreciation	Income statement	Matching principle Accounting period	Inflation	Expenses are recorded in terms of dollars at different points in time, whereas depreciation may represent dollar values at previous periods.
Intangible assets	Goodwill	Balance sheet	Accounting period	Subjective	At times, goodwill can be overvalued or not recorded
Investments	Shares in XYZ	Balance sheet	Historical cost	Inflation	Some investments are recorded at net market value, while others are recorded at cost, whichever is the lower.
Non-current assets	Property, plant and equipment	Balance sheet	Historical cost Accounting period	Subjective	Different net book values are recorded, depending on the depreciation method used.
Owner's equity	Profit and loss	Balance sheet	Accounting period	Inflation	Different dollar values in accounts are added over the life of the business.
Reports	Comparative income statements and balance sheets	Income statement	Accounting period Historical cost	Inflation	The dollar value in the current period is compared with the dollar value in previous periods.
		Balance sheet			

Review & practice 2

- a What** does it mean to say that an accounting report has a limitation?
- b Why** does inflation create a limitation on the usefulness of accounting reports?
- c Which** method of valuing assets has been the most commonly used?
- d Why** is it that depreciation is a subjective valuation?
- e What** makes doubtful debts less than totally accurate?
- f Why** is cost of goods sold not a totally objective valuation?
- g What** is the main reason for the adoption of the historical cost assumption?
- h Why** is there a degree of uncertainty in the valuation of current liabilities?

Part 2 – Analysis of end-of-period financial reports

Already know

- The accounting process from source documents to end-of-period reports
- How to prepare the financial reports (classified income statement, balance sheet and cash flow statement) and the limitations of these reports

Need to know

- Calculation of appropriate ratios using comparative reports of the income statement and balance sheet to assess:
 - profitability or earning capacity
 - liquidity and financial stability
 - managerial effectiveness
 - cash flow

Using this knowledge

- *Assist in discharging accountability* through detailed financial analysis of end-of-period reports

ACCOUNTING VOCABULARY

activity ratios

cash flow adequacy ratio

cash flow to revenue ratio

comparative statements

current ratio

debt or gearing ratio

equity ratio

horizontal analysis

long-term debt payment ratio

quick ratio

ratio of expenses to sales

return on total assets ratio

trend analysis

vertical analysis

Learning objectives

After completing this section, you should be able to:

- 1 understand that a range of analytical techniques can be used
- 2 prepare a ratio analysis on the end-of-period reports of an enterprise
- 3 use spreadsheets to perform the analysis (prepare vertical, horizontal and trend analysis of end-of-period reports)
- 4 prepare graphs based on a trend analysis of end-of-period reports over a number of years
- 5 apply analytical techniques for ratio analysis
- 6 apply analytical techniques for horizontal, vertical and trend analysis
- 7 understand that the ratios are tools for analysis but have limitations.

Analytical techniques

Learning objective 1

Analytical techniques that are commonly used in analysing reports take three forms:

- 1 ratio analysis
- 2 vertical and horizontal analysis
- 3 trend analysis.

Table [12.4] briefly describes each of these analytical techniques, which will be detailed in this chapter.

[12.4]

Type of analysis	Description	Example
Ratio	Profitability ratios Financial stability ratios Management effectiveness ratios Cash flow ratios	The ratio of current assets to current liabilities
Vertical	Analysis of items and/or groups of items in the same financial period	Each line item in an income statement expressed as a percentage of total sales
Horizontal	Analysis of items and/or groups of items across consecutive accounting periods	Comparative financial reports showing more than one year's figures, with the dollar increase/decrease and percentage increase/decrease showing the changes from one year to the next
Trend	Same as horizontal analysis, but analyses items across at least three consecutive accounting periods	Comparative financial reports showing three or more years' figures. Figures from trend analysis often form the basis of data for a graphical presentation showing the trends over a number of years

These techniques are well suited to the use of spreadsheets but could also be calculated by hand and prepared in tables.

Ratio analysis

Learning objective 2

Ratios are a valuable tool for interpreting the financial reports of an enterprise. They are an efficient way to express the relationship of one number to another.



A **ratio** is the number of times one number contains the other number.

Ratio analysis is carried out by management, investors, analysts and creditors – and is keenly considered by competitors. The results of ratio analysis are presented as percentages or as ratios, sometimes both. Percentages and ratios assist decision-makers in interpreting financial reports and support them in assessing the enterprise's:

- profitability (earning capacity)
- financial stability
- effectiveness of management policies
- cash flows.

When expressed as an absolute value, a ratio provides little useful information. It is when a ratio is compared with a benchmark that some interpretation of its favourability or unfavourability can be established, allowing it to be used as the basis for decision-making.



Table [12.5] shows the broad areas of ratio analysis, some other names given to describe these broad areas, how the formula is calculated and the questions that these ratios seek to answer.

[12.5]

Broad area of analysis	Also known as	Ratio	Calculation	Questions ratios seek to answer
Profitability ratios	Earning capacity ratios	Gross profit ratio	$\frac{\text{Gross profit}}{\text{Net sales}}$	Is the profit from the sale of the product/service sufficient to cover the overheads generated in producing/providing that product or service?
		Net profit ratio	$\frac{\text{Net profit}}{\text{Net sales}}$	Is the return on the owner's investment satisfactory, or should alternatives be considered?
		Ratios of expenses to sales (by categories in the reports)	$\frac{\text{Individual (or group of expenses)}}{\text{Net sales}}$	Is any category of expenses indicating that controls over a particular area of the business need to be tightened?
		Return on equity ratio	$\frac{\text{Net profit}}{\text{Average owner's equity}}$	How effective is the return on the enterprise's investment in its assets?
		Return on total assets ratio	$\frac{\text{Net profit} + \text{Interest expense}}{\text{Average total assets}}$	Are the assets generating income at the required level?
Effectiveness of management policies	Activity ratios	Turnover of inventories rate	$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$	How quickly is inventory turned over to generate revenue?
		Turnover of accounts receivable rate (average collection period)	$\frac{\text{Average accounts receivable} \times 365}{\text{Net credit sales}}$	How effectively is cash collected from debtors to ensure a steady cash flow? Are bad debts under control?
Financial stability (liquidity ratios)	Short-term financial stability ratios	Current ratio (working capital ratio)	$\frac{\text{Current assets}}{\text{Current liabilities}}$	How financially secure is this enterprise in the short term?
		Quick ratio (acid test ratio)	$\frac{\text{Current assets} - (\text{Inventories} + \text{Prepayments})}{\text{Current liabilities} - \text{Bank overdraft}}$	Can the enterprise meet all its obligations in the short term?
	Long-term financial stability (solvency ratio)	Debt ratio	$\frac{\text{Total liabilities}}{\text{Total assets}}$	How financially secure is this enterprise in the long term?
	Leverage ratio or gearing ratio	Equity ratio (proprietary ratio)	$\frac{\text{Total owner's equity}}{\text{Total assets}}$	To what degree does this enterprise depend on external finance (debt/borrowings)? How much long-term debt financing is being used by the enterprise?
Cash flow ratios	Efficiency ratio	Cash flow to revenue ratio	$\frac{\text{Net cash from operating activities}}{\text{Net revenue}}$	How efficient are the sales and other revenues of the enterprise in generating cash flows?
	Sufficiency ratios	Cash flow adequacy ratio	$\frac{\text{Net cash from operating activities}}{\text{Asset (PPE) purchases (cash) + Drawings (cash) + long-term debt paid}}$	How sufficient are the cash flows from operations to meet immediate cash obligations?
		Long-term debt payment ratio	$\frac{\text{Long-term liabilities}}{\text{Net cash from operating activities}}$	How many years will it take to pay back long-term debt at the current rate?

Profitability ratios



Profitability is the ability of the enterprise to earn income within the present financial structure of the enterprise.

Profitability or earning capacity ratios focus on the profit determined in the income statement and its relationship with other elements in the financial reports from either the same statement (e.g. sales) or the balance sheet (e.g. assets and equity). As profit is the purpose for the owner investing in a business enterprise, the profit can also be called the 'return' on the owner's investment. These ratios are important because they indicate to the owner just how profitable (or not) their investment is and whether or not continued investment is worthwhile. The profitability ratios addressed in this chapter are:

- gross profit ratio
- net profit ratio
- ratio of expenses to sales
- return on equity ratio
- return on total assets ratio.

Gross profit ratio



The **gross profit ratio** indicates the ability of a trading enterprise to generate gross profit from sales.

The **gross profit ratio** indicates the number of cents in the dollar that represents gross profit in every dollar of sales. It has particular reference to a trading enterprise that operates with a cost of goods sold account. A service industry firm would calculate a profit margin using the net profit ratio.

Table [12.6] provides an overview of this ratio.

[12.6]

Gross profit ratio		
Profitability ratio (earning capacity ratio)	Calculation	$\frac{\text{Gross profit}}{\text{Net sales}}$
	High ratio implications	<ul style="list-style-type: none"> • The enterprise can easily cover all of its selling, administrative and financial costs • It has the capacity to earn an acceptable net profit • It has the capacity to earn an adequate return on investment
	Low ratio implications	<ul style="list-style-type: none"> • The enterprise will have difficulty in covering other operating costs • A net loss may occur • There is an inadequate return on investment
	Interpretative considerations	<ul style="list-style-type: none"> • If the ratio is low, this may indicate an inappropriate selling price margin • This ratio is also calculated in a vertical analysis of the income statement • When considered for one year only: <ul style="list-style-type: none"> – measures the ability of the enterprise to pass on to customers any cost increases through increases in prices – indicates the ability of the enterprise to earn an acceptable net profit – indicates the ability of the enterprise to earn an acceptable return on the owner's investment • When compared with previous years' figures: <ul style="list-style-type: none"> – draws the analyst's attention to the possibility of inaccuracies of inventory valuations that could be due to an incorrect number of items in the stocktake or some incorrect pricing of unit items within the stocktake – emphasises shifts in the sales mix, which could be due to changes in the number and variety of goods sold – signifies any manufacturing or competitive efficiencies/inefficiencies • There may be errors in inventory valuations if the figure is surprisingly low
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Increase selling prices • Reduce cost of goods sold • Find a cheaper supplier for goods sold

Net profit ratio



The **net profit ratio** indicates the ability of the enterprise to generate net profit from sales of goods/services.

The **net profit ratio** reveals the number of cents in the dollar that represents net profit in every dollar of sales. It reflects the effectiveness of managers to minimise expenses per dollar of sales, because net profit is equal to sales revenue less all expenses ($NP = R - E$). All enterprises would be aware of their net profit ratio as an indicator of the business's success in profit terms. A profit is a positive result for an enterprise. How successful it is will be determined by comparison with benchmarks.

Table [12.7] provides an overview of this ratio.

[12.7]

Profitability ratio (earning capacity ratio)	Net profit ratio	
	Calculation	$\frac{\text{Net profit}}{\text{Net sales}}$
	High ratio implications	<ul style="list-style-type: none"> Operating revenue is high and operating expenses are low
	Low ratio implications	<ul style="list-style-type: none"> Selling margin is very low Volume of sales is very low when compared to fixed costs (costs that do not change when more sales are made) Expense are too high when compared to sales revenue and other operating revenue
	Interpretative considerations	<ul style="list-style-type: none"> This rate must be interpreted in conjunction with the gross profit ratio and industry benchmarks Some industries operate on very low profit margins because sales volumes are very high (e.g. discount stores), while others with a lower turnover of goods would be expected to have a higher profit margin (e.g. a grand piano merchant)
	Strategies to improve this ratio	<ul style="list-style-type: none"> Increase sales revenue Reduce expenses

Ratios of expenses to sales



The **expenses to sales ratio** indicates the amount of the sales dollars needed to cover expenses (or the particular category of expenses).

The **expenses to sales ratios** act as a control mechanism on the individual expense categories. Monitoring expenses is crucial to gross and net profit. The managerial accountant would also match these expense categories against budgeted amounts. The categories of expenses are chosen by the users. Expenses could be grouped in any way and the same technique applied, which is to divide the expense or group of expenses by the net sales figure. Numerous options are available to the user.

Table [12.8] provides an overview of these ratios.

[12.8]

Profitability ratio (earning capacity ratio)	Expenses to sales ratios	
	Calculation	$\frac{\text{Individual (or group of) expenses}}{\text{Net sales}}$
	High ratio implications	<ul style="list-style-type: none"> Weak control over the expenses in proportion to the sales
	Low ratio implications	<ul style="list-style-type: none"> Tight control over the expenses in proportion to the sales



Profitability ratio (earning capacity ratio)	Interpretative considerations	<ul style="list-style-type: none"> • These ratios are also calculated when performing a vertical analysis of the income statement • Comparisons with other benchmarks are essential • Unusually high or low expense items must be investigated to ensure that errors have not been made in recording the expense item
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Increase net profit through increased sales while retaining expense levels at the current level • Decrease expenses while retaining or improving sales

Return on equity ratio



The **return on equity ratio** indicates the return to the owner on the amount invested in the business.

A 'return' is the amount that the owner receives for having made the investment in the business. Profit is generally the primary motive for an owner investing their own resources or borrowing to invest in a business. If the costs outweigh the benefits, then the most likely decision is that the investment will not be undertaken. The **return on equity ratio** is very important to the owner, because the owner will compare it with other returns on different types of investments to determine if the business is a worthwhile investment opportunity.

This ratio uses the average amount of owner's equity, because it is the return on the owner's investment employed during the year.

Table [12.9] provides an overview of this ratio.

[12.9]

Average owner's equity is calculated by adding the beginning-of-period owner's equity to the end-of-period owner's equity and dividing by 2.

Return on equity ratio		
Profitability ratio (earning capacity ratios)	Calculation	$\frac{\text{Net profit}}{\text{Average owner's equity}}$
	High ratio implications	<ul style="list-style-type: none"> • A sound investment choice for the owner • May indicate management efficiency • Firm may be undercapitalised
	Low ratio implications	<ul style="list-style-type: none"> • Could be more beneficial for the owner/s to invest elsewhere • May indicate an inefficient management or a highly capitalised, cautiously run business
	Interpretative considerations	<ul style="list-style-type: none"> • The return on the investment may need to be high if future growth is planned • Overcapitalisation by the owner may mean too much money is invested, which is not returning a satisfactory return despite the net profit ratio being effective in comparison with others in the industry
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Decrease owner's investment if it is considered to be overcapitalised • Increase net profit • The owner could contribute more capital if undercapitalised

Return on total assets ratio



The **return on total assets ratio** indicates the ability of the enterprise to generate profits using its assets.

This ratio measures the effectiveness of the assets in generating revenue. Interest, which is paid on any borrowings used to finance the assets, is added back because the productivity of the assets should not be influenced by the financing arrangements for those assets. This ratio refers to the total of the assets that have been used over the year, so an average of assets held is ascertained.

Table [12.10] provides an overview of the **return on total assets** ratio.

Average total assets is calculated by adding the beginning-of-period total assets to the end-of-period total assets and dividing by 2.

[12.10]

Profitability ratio (earning capacity ratios)	Return on total assets ratio	
	Calculation	$\frac{\text{Net profit} + \text{Interest expense}}{\text{Average total assets}}$
	High ratio implications	<ul style="list-style-type: none"> • Good performance of assets • Effective use of firm's assets to generate profit
	Low ratio implications	<ul style="list-style-type: none"> • Poor performance of assets • Ineffective use of firm's assets
	Interpretative considerations	<ul style="list-style-type: none"> • This ratio may be distorted by: <ul style="list-style-type: none"> – heavily depreciated non-current assets – large amounts of intangible assets – unusual income or expense items
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Increase net profit • Decrease average total assets

EXAMPLE 1

The following information has been extracted from the financial statements of Terri de Lacey's business, Posh Shoes. Prepare the profitability ratios.

	\$
Net sales	50 000
Gross profit	35 000
Net profit	15 000
Selling and distribution expenses	6 000
General and administrative expenses	12 000
Finance expenses	2 000
Owner's equity (30/6/2009)	85 000
Owner's equity (30/6/2010)	100 000
Interest expense	200
Total assets (30/6/2009)	120 000
Total assets (30/6/2010)	166 000

The ratios are calculated as follows:

Profitability ratios		Calculation	Result	
Gross profit ratio	Gross profit	35 000	0.7	or
	Net sales	50 000	70.00%	
Net profit ratio	Net profit	15 000	0.3	or
	Net sales	50 000	30.00%	
Ratio of expenses to sales	$\frac{\text{Selling and distribution expenses}}{\text{Net sales}}$	$\frac{6\,000}{50\,000}$	0.12	or
			12.00%	
	$\frac{\text{General and administrative expenses}}{\text{Net sales}}$	$\frac{12\,000}{50\,000}$	0.24	or
			24.00%	
	$\frac{\text{Finance expenses}}{\text{Net sales}}$	$\frac{2\,000}{50\,000}$	0.04	or
			4.00%	
Return on equity ratio	Net profit	15 000	15 000	or
	Average owner's equity	$(85\,000 + 100\,000)/2$	92 500	
Return on total assets ratio	Net profit + Interest expense	15 000 + 200	15 200	or
	Average total assets	$(120\,000 + 166\,000)/2$	143 000	
			0.1063	
			10.63%	

Review & practice 3

Using the following extracts from the income statement and balance sheet for Gemma's Gem Deals, calculate the following ratios:

- a gross profit ratio
- b net profit ratio
- c expense categories to sales ratios
- d rate of return on equity ratio
- e rate of return on total assets ratio

Gemma's Gem Deals Income statement for the years ended 30 June (extract)

	2010 \$	2009 \$
Sales	80 000	100 000
Sales returns	3 000	10 000
Gross profit	56 000	65 000
General and administrative expenses	18 500	25 400
Selling and distribution expenses	12 000	11 600
Interest expenses	500	650
Other finance expenses	<u>1 800</u>	<u>1 450</u>
Total finance expense	2 300	2 100

Gemma's Gem Deals Balance sheet as at 30 June (extract)

	2010 \$	2009 \$
Total current assets	52 000	65 000
Total non-current assets	140 000	142 000
Owner's equity		
Capital (beg)	245 900	252 000
Less Drawings	42 000	32 000
Add Net profit	<u>23 200</u>	<u>25 900</u>
Owner's equity (end)	<u>227 100</u>	<u>245 900</u>

► Exercises 12.7 to 12.10, pages 653–4

Effectiveness of management policies (activity ratios)



Effectiveness of management policies is a measurement of how successful managers have been in directing and maintaining the set policies of an enterprise.

The managerial activities that are the focus of this section are inventories and accounts receivable, which are both current asset items in the balance sheet. Their favourability or unfavourability will therefore have a direct impact on the current and quick ratios, and it is vital that these ratios of short-term stability are interpreted with the activity ratios rather than in isolation. The **effectiveness of management policies** ratios addressed in this chapter are:

- turnover of inventories rate
- turnover of accounts receivable rate.

Turnover of inventories rate



The **turnover of inventories rate** measures how efficiently the inventory of the business is being managed.

Inventory turnover is a factor of both sales and inventory levels. The ratio indicates how many times initial inventory is replaced in the period. Different industries will have different turnover rates (compare a supermarket and a car yard). Seasonal factors also come into play for certain industries. Those that hold a large amount of stock may show poorer turnover figures. Because of the costs associated with holding large volumes of stock, it is becoming increasingly rare for this to occur.

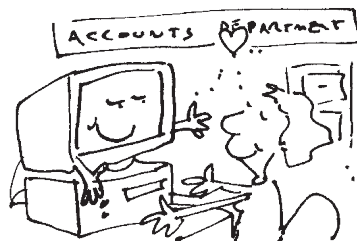
This ratio refers to the total of inventories held throughout the year. Therefore, an average of inventories for the year is determined to account for any changes in inventories during the year.

The result of the calculation represents 'number of times per year'. If the number of days in the period is divided by the number of times inventory is turned over, then the result can be expressed in terms of the number of days it takes to replace initial inventory. A higher turnover would be indicated by a smaller number of days. The higher the turnover, the greater the chance of generating profit. Cash is generated if sales are for cash, so liquidity is also affected. This figure must be considered with other activity and short-term liquidity ratios.

Table [12.11] provides an overview of this ratio.

[12.11]

Activity ratio (effectiveness of management policies)	Turnover of inventories rate	
	Calculation	$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$
	High ratio implications – higher number of 'times'; smaller number of days	<ul style="list-style-type: none"> • Fast-moving inventory • Shortage of inventory available for sale
	Low ratio implications – small number of 'times'; larger number of days	<ul style="list-style-type: none"> • Slow-moving inventory • Large holding of inventory ready for sale
	Interpretative considerations	<ul style="list-style-type: none"> • May reflect the effectiveness of any new campaigns (advertising, targeting or pricing policy) • Could indicate the effectiveness of the just-in-time principle, where inventories are ordered just in time for them to be used so as not to incur storage costs (e.g. whitegoods that take up a considerable amount of room on a showroom floor). A sample is maintained and then stock is ordered as it is required. • A significant difference between this ratio and the current and quick ratios could indicate that the business relies on its sale of inventories for short-term liquidity. This is acceptable if the majority of sales are for cash, but may be unacceptable if credit sales are more frequent.
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Sell more inventories through targeting customers via phone sales, advertising or changing pricing policy • Quit items that are not moving as quickly as other items ('stock dogs'), while ensuring a good supply of the most popular inventory items ('stock stars')



Average inventory is calculated by adding the beginning-of-period inventory balance to the end-of-period balance of inventories and dividing by 2.

Turnover of accounts receivable rate (average collection period)



The **turnover of accounts receivable (average collection period)** measures the efficiency of the business in managing its accounts receivable.

The **turnover of accounts receivable (average collection period)** indicates how quickly the average balance of accounts receivable is being converted into cash throughout the year. In other words, the number of days in one financial year the accounts receivable take to pay their accounts. This is important, because credit is generally given as 30 days and accounts receivable should be collected in accordance with the credit policy of the firm.

This ratio can also be expressed as 'times per year'. If calculated in this manner, the formula is net credit sales/average accounts receivable (where the numerator and denominator are reversed). This calculation gives the *number of times* the average receivables balance is converted to cash over the financial year. To calculate the average collection period, the result of the calculation must then be *divided into 365*.

Table [12.12] provides an overview of this ratio.

[12.12]

Turnover of accounts receivable rate (average collection period)	
Calculation in days	$\frac{\text{Average accounts receivable} \times 365}{\text{Net credit sales}}$
High rate implications – lower number of days	<ul style="list-style-type: none"> • Tight and effective credit policy
Low rate implications – larger number of days	<ul style="list-style-type: none"> • Loose credit policy • In danger of a high number of bad debts
Interpretative considerations	<ul style="list-style-type: none"> • Must compare with the firm's stated policy for collection period • Generally, within 10–15 days of stated credit policy is acceptable • Important to consider with other liquidity ratios • Are bad debts being monitored carefully?
Strategies to improve this ratio	<ul style="list-style-type: none"> • Tightening credit policy and communicating this to debtors • If bad debts are a concern, then are policies for determining who will receive credit being followed? Do they need review? • Follow up late payers by phone, email and letter if necessary • Offer discounts for early cash settlement • Use bright stickers on statements to debtors to remind them of overdue status of accounts

EXAMPLE 2

Bromiley's Bike Shop had the following figures for the financial year 1 July 2009 to 30 June 2010. Calculate the activity ratios for the owner, Gary Bromiley.

	\$
Net sales (credit)	30 000
Cost of goods sold	18 000
Inventory (30/6/2010)	14 000
Inventory (01/7/2009)	21 000
Accounts receivable (30/06/2010)	12 000
Accounts receivable (01/07/2009)	18 000



Average accounts receivable is calculated by adding the beginning accounts receivable balance to the end-of-period accounts receivable balance and dividing by 2.

Activity ratios			Calculation	Result
Turnover of inventories rate	$\frac{\text{Cost of goods sold}}{\text{Average inventory}}$	$\frac{18\,000}{(21\,000 + 14\,000)/2}$	$\frac{18\,000}{17\,500}$	1.028571 times
Turnover of accounts receivable rate (average collection period)	$\frac{\text{Average accts rec} \times 365}{\text{Net credit sales}}$	$\frac{(12\,000 + 18\,000)/2 \times 365}{30\,000}$	$\frac{5\,475\,000}{30\,000}$	182.5 days

Review & practice 4

Using the following extracts from the income statement and balance sheet for Moore & Moore Balloons, calculate the following ratios for 2010 and 2009:

- a turnover of inventories
- b turnover of accounts receivable.

K and P Moore, trading as Moore & Moore Balloons Income statement for the years ended 30 June (extract)

	2010	2009	2008
	\$	\$	\$
Sales – credit	200 000	125 000	140 000
Less Sales returns	10 000	5 000	2 000
	<u>190 000</u>	<u>120 000</u>	<u>138 000</u>
Less Cost of goods sold	87 000	45 000	55 000
Gross profit	<u>103 000</u>	<u>75 000</u>	<u>83 000</u>

K and P Moore, trading as Moore & Moore Balloons Balance sheet as at 30 June (extract)

	2010	2009	2008
	\$	\$	\$
Inventory control	15 000	67 000	48 000
Accounts receivable control	40 000	25 000	32 000

► Exercises 12.11 to 12.13, page 655

Financial stability ratios



Financial stability refers to the short-term liquidity and long-term solvency of an enterprise.

Short-term liquidity is the enterprise's ability to meet its short-term commitments from its current assets. The long-term liquidity of an enterprise is sometimes called 'solvency', which means having access to sufficient funds to meet long-term financial commitments. These ratios should be adequate for a business to always meet both its short-term and long-term financial commitments. The **financial stability ratios** addressed in this chapter are:

- current ratio
- debt ratio
- quick ratio
- equity ratio.

Current ratio



The **current ratio** measures the ability of the enterprise to meet its short-term financial obligations; that is, commitments due in the current financial year.

The **current ratio** reveals how many current assets the enterprise has to cover every dollar of liabilities. Although the rule of thumb is that the ratio should be about 2:1, a business may operate quite successfully on a lower current ratio. Some businesses, such as those that are seasonal in nature, may find that this ratio varies markedly during the year. The main elements of the financial reports affecting this ratio are:

- cash holdings
- accounts receivable
- inventory
- accounts payable.

Trading businesses, which hold considerable quantities of inventories, will have a higher current ratio, as will businesses that carry considerable accounts receivable.

Table [12.13] provides an overview of this ratio.

[12.13]

Current ratio	
Calculation	$\frac{\text{Current assets}}{\text{Current liabilities}}$
High ratio implications	• High degree of assurance that current liabilities can be paid out of current assets
Low ratio implications	• Low degree of assurance that current liabilities can be paid out of current assets
Interpretative considerations	<ul style="list-style-type: none"> • Generally, a current ratio of 2:1 is satisfactory but may be lower, depending on the industry • The desired ratio depends on the type, age and period in the business cycle • An entity with a high investment in inventories should have a higher ratio
Strategies to improve this ratio	<ul style="list-style-type: none"> • Increase current assets such as cash by increasing sales revenue and monitoring expenses closely • Decrease current liabilities – short-term loans could be renegotiated into long-term loans if appropriate

Quick ratio



The **quick ratio** indicates the entity's ability to meet its immediate financial obligations, such as accounts payable, from its immediately accessible or quickly converted assets such as cash and accounts receivable.

This ratio is often called the 'acid test', because it is a stricter test on the entity's short-term liquidity. The **quick ratio** excludes inventories and prepayments because they are difficult to convert to cash in the short term, and bank overdrafts (if any) because this type of debt is usually not due in the next accounting period. The main elements of the financial reports affecting this ratio are:

- cash holdings
- accounts payable.
- accounts receivable



Table [12.14] provides an overview of this ratio.

[12.14]

Financial stability (liquidity) ratio	Quick ratio	
	Calculation	$\frac{\text{Current assets} - (\text{Inventories} + \text{Prepayments})}{\text{Current liabilities} - \text{Bank overdraft}}$
	High ratio implications	<ul style="list-style-type: none"> • High degree of assurance that current liabilities can be paid out of current assets
	Low ratio implications	<ul style="list-style-type: none"> • Entity is depending on inventory turnover to pay current debts (short-term liabilities)
	Interpretative considerations	<ul style="list-style-type: none"> • Generally, a quick ratio of 1:1 is satisfactory • This is a measure of short-term liquidity sometimes preferred over the current ratio, especially if there are large fluctuations in the inventories held by the enterprise
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Increase current assets such as cash by increasing sales revenue and monitoring expenses closely • Decrease current liabilities

Debt ratio



The **debt ratio** indicates the way in which the business is financed and the extent of the firm's borrowings in relation to its assets.

The **debt ratio** is a measure of the relationship between the firm's total liabilities and total assets. Whether assets are funded by debt or equity is an important indicator of the long-term financial stability of the enterprise. The ratio is expressed as a percentage and indicates what proportion of every dollar of assets has been paid for with borrowings (debt). The main elements of the financial reports affecting this ratio are:

- all liabilities
- all assets.

Table [12.15] provides an overview of this ratio.

[12.15]

Financial stability (liquidity) ratio	Debt ratio	
	Calculation	$\frac{\text{Total liabilities}}{\text{Total assets}}$
	High ratio implications	<ul style="list-style-type: none"> • Assets are generally being funded from borrowings
	Low ratio implications	<ul style="list-style-type: none"> • Assets are generally being funded by the owners
	Interpretative considerations	<ul style="list-style-type: none"> • During times of high interest rates, it is better to have a low debt ratio as borrowed funds would attract high interest repayments • Exposure to debt for a sole trader is necessary for growth to occur but must be balanced with the ability to repay the interest and principal • Generally, a 50:50 balance with equity is considered reasonable but may depend on the business and whether it is in a position to expand (allowing it to sustain a higher short-term debt ratio) • This ratio is a mirror reflection of the equity ratio, so both ratios should total 100% • The ratio is calculated in the vertical analysis of the balance sheet • If the ratio of debt is too high and payments are not made, creditors may take action • The alternative to funding assets with debt is for the owner to fund growth (increase in assets) from their own resources
	Strategies to improve this ratio	<ul style="list-style-type: none"> • Decrease debt through repayment • Minimise the need to hold large assets • Minimise the need to borrow beyond the 50:50 balance of debt/equity

Equity ratio



The **equity ratio** indicates the extent to which the owner has financed the business's assets, as opposed to using an alternative source of finance – borrowings (debt).

The **equity ratio** is a measure of the relationship between the total owner's equity and total assets of a firm. The ratio is expressed as a percentage and indicates what proportion of every dollar of assets has been paid for by the owner. The main elements of the financial reports affecting this ratio are:

- owner's equity
- all assets.

Table [12.16] provides an overview of the equity ratio.

[12.16]

Equity ratio	
Calculation	$\frac{\text{Total owner's equity}}{\text{Total assets}}$
High ratio implications	<ul style="list-style-type: none"> • Most funds are being provided by the owner
Low ratio implications	<ul style="list-style-type: none"> • Most funds are being provided by borrowings
Interpretative considerations	<ul style="list-style-type: none"> • During times of low interest rates, it is better to have a high equity ratio because the owner is probably unable to earn more on capital invested in the business than elsewhere • Generally, a 50:50 balance with debt is considered reasonable • This ratio is a mirror reflection of the equity ratio, so both ratios should total 100% • The ratio is calculated in the vertical analysis of the balance sheet • The alternative to funding assets with debt is for the owner to fund growth (increase in assets) from their own resources
Strategies to improve this ratio	<ul style="list-style-type: none"> • Decrease debt through repayment • Minimise the need to hold large assets • Minimise the need to borrow beyond the 50:50 balance of debt/equity

EXAMPLE 3

From the following information extracted from the books of Cia's Icecreamery, determine the short-term liquidity and long-term stability of the business through the calculation of the financial stability ratios:

	\$
Current assets	66 500
Current liabilities	54 000
Inventories	45 000
Prepayments	3 000
Bank overdraft	22 000
Total liabilities	142 000
Total assets	250 000
Total owner's equity	108 000

Financial stability ratios		Calculation		Result
Current ratio	Current assets	66 500	1.231481	1:1.23
	Current liabilities	54 000		
Quick ratio	Current assets – (Inventories + Prepayments)	18 500	0.578125	1:0.58
	Current liabilities – Bank overdraft	32 000		
Debt ratio	Total liabilities	142 000	0.568	56.80%
	Total assets	250 000		
Equity ratio	Total owner's equity	108 000	0.432	43.20%
	Total assets	250 000		

Review & practice 5

Using the following balance sheet for G Storie's Hair Emporium, calculate the following ratios:

- a current ratio
- b quick ratio
- c debt ratio
- d equity ratio

G Storie's Hair Emporium
Balance sheet as at 30 June

	2010 \$	2009 \$
<i>Current assets</i>		
Cash on hand	140	12
Accounts receivable control	800	400
Inventories control	1 887	1 400
Prepaid expenses	640	500
	<u>3 467</u>	<u>2 312</u>
<i>Non-current assets</i>		
Furniture	1 800	1 500
Equipment	5 000	4 000
Buildings	21 000	21 000
Machinery	27 000	17 000
	<u>54 800</u>	<u>43 500</u>
Total assets	<u>58 267</u>	<u>45 812</u>
<i>Current liabilities</i>		
Bank overdraft	6 651	125
Accounts payable	1 886	2 541
Accrued expenses	420	114
	<u>8 957</u>	<u>2 780</u>
<i>Non-current liabilities</i>		
Loans – long-term	10 000	10 000
Total liabilities	<u>18 957</u>	<u>12 780</u>
NET ASSETS	<u>\$39 310</u>	<u>\$33 032</u>
Owner's equity		
Capital	33 032	29 880
Add Net profit	21 278	3 252
	<u>54 310</u>	<u>33 132</u>
Less Drawings	15 000	100
	<u>\$39 310</u>	<u>\$33 032</u>

► Exercises 12.14 to 12.16, pages 655–6

Cash flow ratios



Cash flow ratios focus on the sufficiency of cash to cover cash flow needs and the efficiency of the enterprise to generate cash.

The interpretation of the cash flow statement reveals the effect of operating, financing and investing decisions on the firm's cash flows and ultimately its cash position. The **cash flow ratios** addressed in this chapter are:

- cash flow to revenue ratio
- cash flow adequacy ratio
- long-term debt payment ratio.

Cash flow to revenue ratio



The **cash flow to revenue ratio** indicates the entity's efficiency in converting revenue based on accrual sales and other revenue to cash.

Sales and other revenue items are reported in the income statement on an accrual basis, whereas the cash flow statement shows cash from sales and other business operations. The **cash flow to revenue** ratio indicates how efficiently the entity converts the actual revenue earned into cash from operations shown in the cash flow statement.

Table [12.17] provides an overview of this ratio.

[12.17]

Cash flow to revenue ratio	
Calculation	$\frac{\text{Net cash from operating activities}}{\text{Net revenue}}$
High ratio implications	<ul style="list-style-type: none"> A large proportion of the revenue earned is realised as cash
Low ratio implications	<ul style="list-style-type: none"> A small proportion of the revenue earned is realised as cash
Interpretative considerations	<ul style="list-style-type: none"> For every dollar of sales and other revenue, how much represents cash received from the operations of the business? This ratio is expressed as a percentage Sales and other revenue is accrual-based, whereas net cash is cash-based; so, it indicates efficiency in turning accrual-based profits to cash Compare with the net profit ratio (should be similar over time)
Strategies to improve this ratio	<ul style="list-style-type: none"> Increase cash received from operating activities Increase cash sales compared with credit sales Introduce EFTPOS facilities Improve credit collection rate

Cash flow adequacy ratio



The **cash flow adequacy ratio** indicates the ability of an enterprise to generate cash to cover immediate cash obligations.

The **cash flow adequacy ratio** reveals how much cash from the operations of the business cover the main cash requirements: payment for property, plant and equipment (assets (A)), repayment of debt (L) and payment of drawings to the owner (Oe).

Table [12.18] provides an overview of this ratio.

[12.18]

Cash flow adequacy ratio	
Calculation	$\frac{\text{Net cash from operating activities}}{\text{Asset PPE purchases (cash) + Drawings (cash) + Long-term debt paid}}$
High ratio implications	<ul style="list-style-type: none"> Excess cash is available to meet immediate cash obligations
Low ratio implications	<ul style="list-style-type: none"> Little cash is available to meet immediate cash obligations
Interpretative considerations	<ul style="list-style-type: none"> A value greater than 1 is considered to be satisfactory A downward trend is worthy of investigation Asset expansion for growth in the enterprise may put a drain on this ratio over a number of years
Strategies to improve this ratio	<ul style="list-style-type: none"> Increase cash from operations Investigate any apparent increases in cash for assets PPE, drawings or debt repayment

PPE = property, plant and equipment.

Long-term debt payment ratio



The **long-term debt payment ratio** indicates an enterprise's ability to make its long-term contractual payments.

This ratio indicates the number of years it takes to pay back long-term debt at the current rate at which the enterprise is generating cash. The ratio is based on information in both the balance sheet and the cash flow statement.

Table [12.19] provides an overview of this ratio.

[12.19]

Long-term debt payment ratio	
Calculation	$\frac{\text{Long-term liabilities}}{\text{Net cash from operating activities}}$
High ratio implications	<ul style="list-style-type: none"> A considerable time is needed to pay back debt More debt has been taken on by the enterprise
Low ratio implications	<ul style="list-style-type: none"> A short time is needed to pay back debt If lower than in previous years, may indicate that debt has been repaid or that net cash from operations has improved
Interpretative considerations	<ul style="list-style-type: none"> This ratio is expressed as years – net cash from operations over one year is divided into the long-term debt payment, so if the enterprise continued to generate that amount of cash, the result shows the number of years it would take to clear its long-term debt Given a level of debt, the enterprise should be able to see a decreasing ratio over time unless more debt is taken on A decrease in the number of years indicates that the enterprise can repay its debt more quickly with cash generated from operations This ratio improves if the number of years decreases
Strategies to improve this ratio	<ul style="list-style-type: none"> Increase cash from operations Decrease debt

EXAMPLE 4

The following information has been extracted from the cash flow statement and the balance sheet of Bland Industries for the period 1 July 2009 to 30 June 2010. Calculate the cash flow ratios based on this data.

Net cash from operating activities	86 000
<i>Cash flows from investing activities</i>	
Inflows:	
Sale of machinery	120 000
Outflows:	
Purchase of machinery	(650 000)
Net cash from investing activities	(530 000)
<i>Cash flows from financing activities</i>	
Inflows:	
Proceeds from loans and borrowings	125 000
Capital contribution	0
Outflows:	
Payment of drawings	(50 000)
Payment of long-term loans	(30 000)
Net cash from financing activities	45 000
<i>Additional information</i>	
Net revenue	145 000
Mortgage	155 000
Loan (due December 2013)	100 000

Cash flow ratios	Calculation	Result
Cash flow to revenue ratio		
$\frac{\text{Net cash from operating activities}}{\text{Net revenue}}$	$\frac{86\,000}{145\,000}$	0.5931 59.31%
Cash flow adequacy ratio		
$\frac{\text{Net cash from operating activities}}{\text{Asset PPE purchases (cash) + Drawings (cash) + Long-term debt paid}}$	$\frac{86\,000}{650\,000+50\,000+30\,000}$	0.1178 11.78%
Long-term debt payment ratio		
$\frac{\text{Long-term liabilities}}{\text{Net cash from operating activities}}$	$\frac{155\,000+100\,000}{86\,000}$	2.965 times

Review & practice 6

Using the following extracts from the cash flow statement and income statement for G Storie's Hair Emporium, together with the balance sheet of G Storie's Hair Emporium used in review & practice 5 on page 613, calculate the following ratios:

- a** cash flow to sales ratio **c** long-term debt payment ratio.
b cash flow adequacy ratio

G Storie's Hair Emporium Income statement for the year ended 30 June (extract)

	2010	2009
	\$	\$
Sales	25 400	6 770
Less Sales returns	400	100
	<u>\$25 000</u>	<u>\$6 670</u>

G Storie's Hair Emporium Cash flow statement for the year ended 30 June (extract)

	2010	2009
	\$	\$
Net cash from operating activities	24 788	5 466
Cash flows from investing activities		
Purchases of assets	11 300	21 000
Cash flows from financing activities		
Drawings	15 000	100
Payment of loans and borrowings	0	13 000

► Exercises 12.17 and 12.18, page 656

Performing the analysis with spreadsheets

Learning objective 3 Analysis of financial reports lends itself well to the use of spreadsheets, so this section of the chapter will illustrate how spreadsheets can be used to perform such analysis. The ratios are also easily calculated using a calculator.

The end-of-period reports for E Coaldrake shown in example 5 will be used in the application of these analytical techniques.

✓ Helpful hints

Hyperlinks and macros are useful inclusions in a spreadsheet to assist the user to navigate between the sheets in a workbook.

- Use multiple worksheets in the one workbook for analytical purposes. Put each of the statements into its own sheet and rename the sheets as IS, BS, CFS and RATIOS.
- Rename sheets by double-clicking on the sheet tab using the left mouse button or right-click to select 'rename'. Use short codes for each sheet, because the sheet name is used when a cell reference is made from one sheet to another, and long sheet names make the formula too long when printing.
- Create the sheets and then insert a sheet at the beginning for documentation that will help other users find the information they require. Use hyperlinks or macro buttons in this first sheet to make the spreadsheet user-friendly.
- Where a formula refers to a cell in another sheet in the workbook, the name of the sheet is included in the cell reference, followed by an exclamation mark. See cells B38 and C38 on page 618 in example 5 sheet 'BS', which refer to a cell in sheet 'IS'.

EXAMPLE 5

The following fully classified, comparative, end-of-period reports were prepared for E Coaldrake as at 30 June 2010.

	A	B	C		B	C
1	E Coaldrake			1		
2	Comparative income statement			2		
3	for the year ended 30 June			3		
4		2010	2009	4	2010	2009
5	Sales	\$	\$	5	\$	\$
6	Cash	110000	80000	6	110000	80000
7	Credit	520000	480000	7	520000	480000
8		630000	560000	8	=SUM(B6:B7)	=SUM(C6:C7)
9	Less Cost of goods sold	320000	245000	9	320000	245000
10	GROSS PROFIT	310000	315000	10	=B8-B9	=C8-C9
11	Less Expenses from ordinary activities			11		
12	<i>SELLING AND DISTRIBUTION</i>			12		
13	Wages – sales	75000	55000	13	75000	55000
14	Rent – showroom	39000	39000	14	39000	39000
15	Advertising and promotion	56000	56000	15	56000	56000
16	Total selling and distribution	170000	150000	16	=SUM(B13:B15)	=SUM(C13:C15)
17	<i>GENERAL AND ADMINISTRATIVE</i>			17		
18	Telephone	9000	3200	18	9000	3200
19	Depreciation – furniture and fixtures	150	100	19	150	100
20	Depreciation – equipment	260	200	20	260	200
21	Depreciation – motor vehicle	5000	5000	21	5000	5000
22	Depreciation – building	25000	3500	22	25000	3500
23	Wages	34700	22200	23	34700	22200
24	Postage	3480	1500	24	3480	1500
25	Insurance	2410	4300	25	2410	4300
26	Loss by theft	0	5000	26	0	5000
27	Total general and administrative	80000	45000	27	=SUM(B18:B26)	=SUM(C18:C26)
28	<i>FINANCE</i>			28		
29	Interest on loan	2000	500	29	2000	500
30	Bad debts	3000	1500	30	3000	1500
31	Total finance	5000	2000	31	=SUM(B29:B30)	=SUM(C29:C30)
32	Net expenses from ordinary activities	255000	197000	32	=SUM(B31,B27,B16)	=SUM(C31,C27,C16)
33	NET PROFIT	55000	118000	33	=B10-B32	=C10-C32

	A	B	C
1	E Coaldrake		
2	Comparative balance sheet		
3	as at 30 June		
4		2010	2009
5	Assets	\$	\$
6	<i>Current assets</i>		
7	Bank	70000	108000
8	Accounts receivable	200000	220000
9	Inventories	40000	60000
10	Prepaid expenses	1000	3590
11	Total current assets	311000	391590
12	<i>Non-current assets</i>		
13	Furniture and fixtures	15000	7500
14	<i>Less Accumulated depreciation</i>	-300	-150
15	Equipment	45000	30000
16	<i>Less Accumulated depreciation</i>	-760	-500
17	Motor vehicle	130000	150000
18	<i>Less Accumulated depreciation</i>	-45000	-40000
19	Building	520000	520000
20	<i>Less Accumulated depreciation</i>	-175000	-150000
21	Investments	475000	212000
22	Total non-current assets	963940	728850
23	Total assets	1274940	1120440
24	Liabilities and equity		
25	<i>Current liabilities</i>		
26	Accounts payable	238000	200000
27	GST clearing	-1000	-500
28	Accrued expenses	12000	20000
29	Total current liabilities	249000	219500
30	<i>Non-current liabilities</i>		
31	Loan (1/12/2015)	300000	210000
32	Mortgage (maturity date 1/2/2015)	150000	170000
33	Total non-current liabilities	450000	380000
34	Total liabilities	699000	599500
35	Equity		
36	Capital	520940	402940
37	Add Net profit	55000	118000
38	Total equity	575940	520940
39	Total liabilities and equity	1274940	1120440
40			

	B	C
1		
2		
3		
4	2010	2009
5	\$	\$
6		
7	70000	108000
8	200000	220000
9	40000	60000
10	1000	3590
11	=SUM(B7:B10)	=SUM(C7:C10)
12		
13	15000	7500
14	-300	-150
15	45000	30000
16	-760	-500
17	130000	150000
18	-45000	-40000
19	520000	520000
20	-175000	-150000
21	475000	212000
22	=SUM(B13:B21)	=SUM(C13:C21)
23	=B11+B22	=C11+C22
24		
25		
26	238000	200000
27	-1000	-500
28	12000	20000
29	=SUM(B26:B28)	=SUM(C26:C28)
30		
31	300000	210000
32	150000	170000
33	=SUM(B31:B32)	=SUM(C31:C32)
34	=B29+B33	=C29+C33
35		
36	520940	402940
37	55000	118000
38	=SUM(B36:B37)	=SUM(C36:C37)
39	=B34+B38	=C34+C38

Applying ratio analysis to the income statement and balance sheet

Learning objective 5
See page 647 for more on the written report.

Ratio analysis is used as the basis of a written report about the financial status of an enterprise. Before the report can be written, the ratios must be calculated.

In some ratios, additional information from the previous period is necessary in order to complete the ratios for the previous year. Generally, this information is given in addition to the comparative end-of-year reports. Where an analyst does not have access to the necessary figures, the figure is ignored. This may give a somewhat inaccurate result, but, as these figures are used merely to calculate an average in each case (average total assets, inventories and accounts receivable), the result from using just the figures in the comparative reports will be reasonably accurate.

The following spreadsheet [12.20] lists the profitability, activity and financial stability ratios, and summarises the calculations required. Then, extracting the required figures from the income statement and balance sheet for E Coaldrake shown in examples on pages 625–6, ratios are found for both 2010 and 2009.

[12.21]

The formulas for the calculations on the ratios sheet [12.20] are shown in [12.21] below.

	D	E	F	G	H	2009				K	L	M
1	2010											
	Check figures for average calculations			Figures		Calculation	Ratio result	Check figures for average calculations		Figures	Calculation	Ratio result
2							=G3					
3						=ISIB10	=F3/F4			=ISIC10	=K3/K4	=L3
4						=ISIB8				=ISIC8		
5						=ISIB33	=F5/F6	=G5		=ISIC33	=K5/K6	=L5
6						=ISIB8				=ISIC8		
7												
8												
9						=ISIB33	=F9/F10	=G9		=ISIC33	=K9/K10	=L9
10	=BSIB36	=BSIB38	=D10+E10)/2					=BSIC36	=BSIC39	=I10+J10)/2		
11			=ISIB33			=F11/F12	=G11			=ISIC33	=K11/K12	=L11
12	=BSIC23	=BSIB23	=D12+E12)/2					=BSIC23	=B26	=I12+J12)/2		
13			=ISIB9			=F13/F14	=365/G13			=ISIC9	=K13/K14	=365/L13
14	=BSIB9	=BSIC9	=D14+E14)/2			times	days	=BSIC9	=B27	=I14+J14)/2		days
15	=BSIB8	=BSIC8	=D15+E15)/2*365			=F15/F16	=G15	=BSIC8	=B28	=I15+J15)/2*365	=K15/K16	=L15
16			=ISIB7				days			=ISIC7		days
17			=BSIB11			=F17/F18	=G17			=BSIC11	=K17/K18	=L17
18			=BSIB29				:1			=BSIC29		:1
19			=BSIB11-(BSIB9+BSIB10)			=F19/F20	=G19			=BSIC11-(BSIC9+BSIC10)	=K19/K20	=L19
20			=BSIB29				:1			=BSIC29		:1
21			=BSIB38			=F21/F22	=G21			=BSIC38	=K21/K22	=L21
22			=BSIB23							=BSIC23		
23			=BSIB34			=F23/F24	=G23			=BSIC34	=K23/K24	=L23
24			=BSIB23							=BSIC23		

Review & practice 7

Using ratio analysis, prepare profitability ratios, activity ratios (effectiveness of management policies) and financial stability ratios for the following enterprise for 2010 and 2009:

	A	B	C
1	M Schroder trading as Happy Bots Nursery Service		
2	Income statement		
3	for the year ended 30 June		
4		2010	2009
5		\$	\$
6	Sales	22843	11846
7	Rental revenue	713	682
8	Interest revenue	282	422
9	Total revenue from ordinary activities	23838	12950
10			
11	Cost of goods sold	4742	2447
12	Depreciation – buildings	318	349
13	Interest expense	1222	1646
14	Wages	6629	2915
15	Staff training expense	404	223
16	Electricity	245	144
17	Telephone	985	662
18	Advertising	2144	987
19	Postage	85	75
20	Office supplies	206	250
21	Total expenses from ordinary activities	16980	9698
22	NET PROFIT	\$6858	\$3252
23			
24	Balance sheet		
25	as at 30 June	2010	2009
26	<i>Current assets</i>		
27	Bank	355	2740
28	Accounts receivable control	2711	401
29	Inventories control	1992	1407
30	Prepaid expenses	2610	1218
31		7668	5766
32	<i>Non-current assets</i>		
33	Buildings	31891	20237
34	Equipment	6573	2398
35	Furniture	339	120
36	Licences	80	12
37		38883	22767
38	Total assets	46551	28533
39	<i>Current liabilities</i>		
40	Bank overdraft	3704	36
41	Accounts payable control	1886	2274
42	Current loans	1756	1059
43	Accrued expenses	2276	1156
44	Other payables	2860	1633
45		12482	6158
46	<i>Non-current liabilities</i>		
47	Loans – long-term	15900	9213
48	Total liabilities	28382	15371
49			
50	NET ASSETS	\$18169	\$13162
51	Owner's equity		
52	Capital	13162	10811
53	Add Net profit	6858	3252
54		20020	14063
55	Less Drawings	1851	901
56		\$18169	\$13162
57			
58	Additional information as at 30/6/2010:		
59	<i>Total assets</i>	17844	
60	<i>Inventories control</i>	1478	
61	<i>Accounts receivable control</i>	547	

Applying ratio analysis to the cash flow statement

The cash flow statement ratios discussed in chapter 11 will now be applied in a spreadsheet application similar to the ratio analysis performed on the income statement and balance sheet.

EXAMPLE 6

The following comparative cash flow statement [12.22] was prepared for Thane Publishing as at 30 June 2010.

[12.22]

	A	B	C		B	C
1	Thane Publishing					
2	Cash flow statement					
3	for the year ended 30 June					
4		2010	2009	4	2010	2009
5		Inflows	Inflows	5	Inflows	Inflows
6		(Outflows)	(Outflows)	6	(Outflows)	(Outflows)
7	Cash flows from operating activities			7		
8	Receipts from customers	58440.00	61800.00	8		
9	Payments to suppliers	(7140.00)	(3500.00)	9		
10	Payments to employees	(21000.00)	(28930.60)	10		
11	Interest paid	(200.00)	(100.00)	11		
12	GST remitted	(2541.28)	(2448.08)	12		
13	Payment of operating expenses	(22310.00)	(25641.32)	13		
14	Net cash provided by operating activities	5248.72	1180.00	14	=SUM(B8:B13)	=SUM(C8:C13)
15				15		
16	Cash flows from investing activities			16		
17	Purchase of furniture	(14000.00)	(4000.00)	17		
18	Purchase of investment	(12000.00)	0.00	18		
19	Net cash used in investing activities	(26000.00)	(4000.00)	19		
20				20	=SUM(B17:B18)	=SUM(C17:C18)
21	Cash flows from financing activities			21		
22	Drawings	(5000.00)	(16285.00)	22		
23	Proceeds from borrowings	30000.00	20000.00	23		
24	Net cash provided by financing activities	25000.00	3715.00	24	=SUM(B22:B23)	=SUM(C22:C23)
25				25		
26	Net increase (decrease) in cash held	4248.72	895.00	26	=SUM(B14:B19:B24)	=SUM(C14:C19,C24)
27	Cash at beginning of year	28720.00	27825.00	27		
28	Cash at end of year	32968.72	28720.00	28	=SUM(B26:B27)	=SUM(C26:C27)
29	Additional information:			29		
30	Net revenues	22090.91	25662.00	30		
31	Long-term liability	50000.00	20000.00	31		

Because no averages are used in calculating the cash flow statement ratios [12.23], the check column is deleted. These ratios access each of the previously prepared end-of-period reports: income statement and balance sheet, as well as the cash flow statement.

[12.23]

	A	B	C	D	E	F	G	H
1	Cash flow ratios		2010			2009		
2			Figures	Calculation	Ratio result	Figures	Calculation	Ratio result
3								
4	Cash flow to revenue ratio	Net cash from operating activities	5248.72	0.238	23.76%	1180.00	0.05	4.60%
5		Net revenue	22090.91			25662.00		
6	Cash flow adequacy ratio	Net cash from operating activities	5248.72	0.169	16.93%	1180.00	0.06	5.82%
7		Asset purchases (cash) + drawings (cash) + long-term debt paid	31000.00			20285.00		
8	Long-term debt payment ratio	Long-term liabilities	50000.00	9.53	9.53	20000.00	16.95	16.95
9		Net cash from operating activities	5248.72		times	1180.00		times

The formulas for the cash flow ratios would appear as shown below:

	A	B	C	D	E	F	G	H
1	Cash flow ratios		2010			2009		
2			Figures	Calc.	Ratio result	Figures	Calculation	Ratio result
3								
4	Cash flow to revenue ratio	Net cash from operating activities	=CFS!B14	=C4/C5	=D4	=CFS!C14	=F4/F5	=G4
5		Net revenue	=B31			=C31		
6	Cash flow adequacy ratio	Net cash from operating activities	=CFS!B14	=C6/C7	=D6	=CFS!C14	=F6/F7	=G6
7		Asset purchases (cash) + drawings (cash) + long-term debt paid	=-(CFS!B17+CFS!B18+CFS!B22)			=-(CFS!C14+ CFS!C19)		
8	Long-term debt payment ratio	Long-term liabilities	=CFS!B31	=C8/C9	=D8	=CFS!C31	=F8/F9	=G8
9		Net cash from operating activities	=CFS!B31/CFS!B14			=CFS!C14		



Review & practice 8

Refer to the cash flow statement on page 624 for Matthew Price. Using ratio analysis, prepare the cash flow to revenue, cash flow adequacy and long-term debt payment ratios for 2010 and 2009.

Additional information:

	2010	2009
	\$	\$
Net sales	35 900	23 600
Other revenue	2 100	4 400



Matthew Price
Cash flow statement for the year ended 30 June

	2010	2009
	\$	\$
Cash flows from operating activities		
Receipts from customers	22 510	15 247
Payments to suppliers and employees	(14 928)	(8 792)
Distributions received	52	36
Interest received	167	356
Borrowing costs paid	(1 222)	(1 655)
Other expenses paid	(1 751)	(528)
Net operating cash flows	<u>4 828</u>	<u>4 664</u>
Cash flows from investing activities		
Proceeds of sale of property, plant and equipment	–	16 232
Purchase of property, plant and equipment	(4 928)	(2 733)
Purchase of licenses	(16 548)	(6 679)
Purchase of other investments	(300)	(1 407)
Proceeds from sale of investment	1 408	–
Loans made to other parties	(2 462)	
Repayment of loans		3 577
Net investing cash flows	<u>–22 830</u>	<u>8 990</u>
Cash flows from financing activities		
Capital contributed	8 795	700
Drawings	(3 414)	(3 878)
Proceeds from borrowings	9 088	8 798
Repayment of borrowings	(2 520)	(16 948)
Net financing cash flows	<u>11 949</u>	<u>(11 328)</u>
Net increase (decrease) in cash held	(6 053)	2 326
Cash at beginning of year	2 704	3 78
Cash at the end of year	<u><u>(\$3 349)</u></u>	<u><u>\$2 704</u></u>

► Exercises 12.21 and 12.22, page 659

Applying other analytical techniques

Learning objective 6

Recall that ratio analysis is one of three different types of analysis that can be performed on the end-of-period reports. The other types of analysis commonly used together with ratio analysis are:

- vertical and horizontal analysis
- trend analysis.

All three types of analysis are important tools used by accountants.

Horizontal analysis and trend analysis are performed using comparative financial reports taken over two years and more than two years, respectively. Vertical analysis, because it deals with the relationships within each report individually, can be done at any time throughout the financial year.

Vertical analysis



Vertical analysis is a technique used to analyse items and/or groups of items in the same financial period.

Vertical analysis centres on one type of statement – either the income statement or balance sheet. It can be performed at any time during the financial period using

interim statements. This allows management to track progress against budgeted figures and to closely monitor the performance of the business.

In vertical analysis, every line in the report is expressed in relationship to one particular item in that statement.

- In the income statement, the *net sales* are used as the denominator, so all items are expressed as a percentage of net sales.
- In the balance sheet, the total assets are used as the denominator, so all items are expressed as a percentage of total assets.

Example 7 shows vertical analysis applied to the financial reports for E Coaldrake, which were used in example 5.

EXAMPLE 7

Using the end-of-period financial reports prepared for E Coaldrake currently in the worksheet named IS, vertical analysis is performed on the income statement. The formulas for this sheet will appear as shown below:

	A	B	C	D	E		C	E
1	E Coaldrake					1		
2	Comparative income statement					2		
3	for the year ended 30 June					3		
4		2010		2009		4		
5	Sales	\$		\$		5		
6	Cash	110000	17.46%	80000	14.29%	6	=B6/\$B\$8	=D6/\$D\$8
7	Credit	520000	82.54%	480000	85.71%	7	=B7/\$B\$8	=D7/\$D\$8
8		630000	100.00%	560000	100.00%	8	=B8/\$B\$8	=D8/\$D\$8
9	Less Cost of goods sold	320000	50.79%	245000	43.75%	9	=B9/\$B\$8	=D9/\$D\$8
10	GROSS PROFIT	310000	49.21%	315000	56.25%	10	=B10/\$B\$8	=D10/\$D\$8
11	Less Ordinary expenses					11		
12	<i>Selling and distribution</i>					12		
13	Wages – sales	75000	11.90%	55000	9.82%	13	=B13/\$B\$8	=D13/\$D\$8
14	Rent – showroom	39000	6.19%	39000	6.96%	14	=B14/\$B\$8	=D14/\$D\$8
15	Advertising and promotion	56000	8.89%	56000	10.00%	15	=B15/\$B\$8	=D15/\$D\$8
16	Total selling and distribution	170000	26.98%	150000	26.79%	16	=B16/\$B\$8	=D16/\$D\$8
17	<i>General and administrative</i>					17		
18	Telephone	9000	1.43%	3200	0.57%	18	=B18/\$B\$8	=D18/\$D\$8
19	Depreciation – furniture and fixtures	150	0.02%	100	0.02%	19	=B19/\$B\$8	=D19/\$D\$8
20	Depreciation – equipment	260	0.04%	200	0.04%	20	=B20/\$B\$8	=D20/\$D\$8
21	Depreciation – motor vehicle	5000	0.79%	5000	0.89%	21	=B21/\$B\$8	=D21/\$D\$8
22	Depreciation – building	25000	3.97%	3500	0.63%	22	=B22/\$B\$8	=D22/\$D\$8
23	Wages	34700	5.51%	22200	3.96%	23	=B23/\$B\$8	=D23/\$D\$8
24	Postage	3480	0.55%	1500	0.27%	24	=B24/\$B\$8	=D24/\$D\$8
25	Insurance	2410	0.38%	4300	0.77%	25	=B25/\$B\$8	=D25/\$D\$8
26	Loss by theft	0	0.00%	5000	0.89%	26	=B26/\$B\$8	=D26/\$D\$8
27	Total general and administrative	80000	12.70%	45000	8.04%	27	=B27/\$B\$8	=D27/\$D\$8
28	<i>Finance</i>					28		
29	Interest on loan	2000	0.32%	500	0.09%	29	=B29/\$B\$8	=D29/\$D\$8
30	Bad debts	3000	0.48%	1500	0.27%	30	=B30/\$B\$8	=D30/\$D\$8
31	Total finance	5000	0.79%	2000	0.36%	31	=B31/\$B\$8	=D31/\$D\$8
32	Net ordinary expenses	255000	40.48%	197000	35.18%	32	=B32/\$B\$8	=D32/\$D\$8
33	NET PROFIT	\$55000	8.73%	\$118000	21.07%	33	=B33/\$B\$8	=D33/\$D\$8



Steps for vertical analysis

- 1 Insert columns C and E.
- 2 In cell C6, key in the formula: =B6/B8.
- 3 Format this cell to a percentage using the % icon on the toolbar (or through 'format cells').



- 4 Format the cell to two decimal places using the 'Increase Decimal' icon on the toolbar (or through 'format cells').
- 5 As this formula is to be copied down column C so that each figure in column B is shown as a percentage of net sales, the cell that refers to net sales needs to be an absolute cell reference. Edit the formula in C6 using the F4 key so that the formula reads =B6/\$B\$8.
- 6 Copy this cell down to C33.
- 7 Delete cells opposite headings that show 0.
- 8 Repeat steps 1–7 for column E.

Using the end-of-period financial reports prepared for E Coaldrake currently in the worksheet named BS, vertical analysis is performed on the balance sheet. Follow the steps given for vertical analysis in the income statement, but in the balance sheet use *total assets as the base figure*.

	A	B	C	D	E		C	E
1	E Coaldrake					1		
2	Comparative balance sheet					2		
3	as at 30 June					3		
4		2010		2009		4		
5	Assets	\$		\$		5		
6	<i>Current assets</i>					6		
7	Bank	70000	5.49%	108000	9.64%	7	=B7/\$B\$23	=D7/\$D\$23
8	Accounts receivable	200000	15.69%	220000	19.64%	8	=B8/\$B\$23	=D8/\$D\$23
9	Inventories	40000	3.14%	60000	5.36%	9	=B9/\$B\$23	=D9/\$D\$23
10	Prepaid expenses	1000	0.08%	3590	0.32%	10	=B10/\$B\$23	=D10/\$D\$23
11	Total current assets	311000	24.39%	391590	34.95%	11	=B11/\$B\$23	=D11/\$D\$23
12	<i>Non-current assets</i>					12		
13	Furniture and fixtures	15000	1.18%	7500	0.67%	13	=B13/\$B\$23	=D13/\$D\$23
14	Less Accumulated depreciation	-300	-0.02%	-150	-0.01%	14	=B14/\$B\$23	=D14/\$D\$23
15	Equipment	45000	3.53%	30000	2.68%	15	=B15/\$B\$23	=D15/\$D\$23
16	Less Accumulated depreciation	-760	-0.06%	-500	-0.04%	16	=B16/\$B\$23	=D16/\$D\$23
17	Motor vehicle	130000	10.20%	150000	13.39%	17	=B17/\$B\$23	=D17/\$D\$23
18	Less Accumulated depreciation	-45000	-3.53%	-40000	-3.57%	18	=B18/\$B\$23	=D18/\$D\$23
19	Building	520000	40.79%	520000	46.41%	19	=B19/\$B\$23	=D19/\$D\$23
20	Less Accumulated depreciation	-175000	-13.73%	-150000	-13.39%	20	=B20/\$B\$23	=D20/\$D\$23
21	Investments	475000	37.26%	212000	18.92%	21	=B21/\$B\$23	=D21/\$D\$23
22	Total non-current assets	963940	75.61%	728850	65.05%	22	=B22/\$B\$23	=D22/\$D\$23
23	Total assets	\$1274940	100.00%	\$1120440	100.00%	23	=B23/\$B\$23	=D23/\$D\$23
24	Liabilities and equity					24		
25	<i>Current liabilities</i>					25		
26	Accounts payable	238000	18.67%	200000	17.85%	26	=B26/\$B\$23	=D26/\$D\$23
27	GST clearing	-1000	-0.08%	-500	-0.04%	27	=B27/\$B\$23	=D27/\$D\$23
28	Accrued expenses	12000	0.94%	20000	1.79%	28	=B28/\$B\$23	=D28/\$D\$23
29	Total current liabilities	\$249000	19.53%	\$219500	19.59%	29	=B29/\$B\$23	=D29/\$D\$23
30	Non-current liabilities					30		
31	Loan (1/12/2015)	300000	23.53%	210000	18.74%	31	=B31/\$B\$23	=D31/\$D\$23
32	Mortgage(maturity date 1/2/2015)	150000	11.77%	170000	15.17%	32	=B32/\$B\$23	=D32/\$D\$23
33	Total non-current liabilities	450000	35.30%	380000	33.92%	33	=B33/\$B\$23	=D33/\$D\$23
34	Total liabilities	699000	54.83%	599500	53.51%	34	=B34/\$B\$23	=D34/\$D\$23
35	Equity					35		
36	Capital	520940	40.86%	402940	35.96%	36	=B36/\$B\$23	=D36/\$D\$23
37	Add Net profit	55000	4.31%	118000	10.53%	37	=B37/\$B\$23	=D37/\$D\$23
38	Total equity	575940	45.17%	520940	46.49%	38	=B38/\$B\$23	=D38/\$D\$23
39	Total liabilities and equity	\$1274940	100.00%	\$1120440	100.00%	39	=B39/\$B\$23	=D39/\$D\$23
40						40		

✓ Helpful hints

- When performing vertical analysis in the income statement, always check that the figure for net sales (the denominator in the formula for vertical analysis or the base figure) is 100%.
- When performing vertical analysis in the balance sheet, always check that the figure for total assets (the denominator in the formula for vertical analysis or the base figure) is 100%. (Because total assets should always be the same as total liabilities and equity, check that this total also shows 100%.)

Review & practice 9

Prepare a vertical analysis on the financial reports of M Schroder, trading as Happy Bots Nursery Supplies, for 2010 and 2009.

	A	B	C
1	M Schroder trading as Happy Bots Nursery Service		
2	Income statement		
3	for the year ended 30 June		
4	Sales	2010	2009
5	Rental revenue	22843	11846
6	Interest revenue	713	682
7	Total revenue from operating activities	282	422
8	Cost of goods sold	23838	12950
9	Depreciation – buildings	4742	2447
10	Interest expense	318	349
11	Wages	1222	1646
12	Staff training expense	6629	2915
13	Electricity	404	223
14	Telephone	245	144
15	Advertising	985	662
16	Postage	2144	987
17	Office supplies	85	75
18	Total expenses from operating activities	206	250
19	NET PROFIT	16980	9698
20		\$6858	\$3252
21	Balance sheet		
22	as at 30 June		
23	Current assets	2010	2009
24	Bank		
25	Accounts receivable control	355	2740
26	Inventories control	2711	401
27	Prepaid expenses	1992	1407
28	Total current assets	2610	1218
29	Non-current assets	7668	5766
30	Buildings		
31	Equipment	31891	20237
32	Furniture	6573	2398
33	Licences	339	120
34	Total non-current assets	80	12
35	Total assets	38883	22767
36	Current liabilities	46551	28533
37	Bank overdraft		
38	Accounts payable	3704	36
39	Current loans	1886	2274
40	Accrued expenses	1756	1059
41	Other payables	2276	1156
42	Total current liabilities	2860	1633
43	Non-current liabilities	12482	6158
44	Loans – long-term		
45	Total liabilities	15900	9213
46	NET ASSETS	28382	15371
47	Owner's equity	\$18169	\$13162
48	Capital		
49	Add Net profit	13162	10811
50		6858	3252
51	Less Drawings	20020	14063
52		1851	901
		\$18169	\$13162

Horizontal analysis



Horizontal analysis is a technique used to analyse items and/or groups of items in consecutive financial periods.

Horizontal analysis uses end-of-period reports from two consecutive years, so it is generally performed after the completion of the end-of-period reports. This allows management to track progress against the historical data of the preceding two years to monitor the current year's performance of the business.

In horizontal analysis, every line in the report is expressed in relationship to the same figure for the preceding year to determine whether or not the item increased or decreased during the following financial year.

Horizontal analysis and variances

When preparing horizontal analysis of the financial reports, two variance columns are included. The first is a variance column that shows any dollar amount increase or decrease (shown with a minus sign or in brackets) between the two years. The percentage change is then shown in the next column. The percentage change column gives any change between the two years as a percentage of the earlier year's data.

Examples 8 and 9 show horizontal analysis applied to the financial reports for E Coaldrake.

EXAMPLE 8

Using the end-of-period reports prepared for E Coaldrake in the worksheet named IS, horizontal analysis is performed on the income statement.

	A	B	C	D	E		D	E
1	E Coaldrake					1		
2	Comparative income statement					2		
3	for the year ended 30 June					3		
4		2010	2009	Increase (Decrease)	Percent change	4	Increase (Decrease)	Percent change
5	Sales	\$	\$			5		
6	Cash	110000	80000	30000	37.50%	6	=B6-C6	=D6/C6
7	Credit	520000	480000	40000	8.33%	7	=B7-C7	=D7/C7
8		630000	560000	70000	12.50%	8	=B8-C8	=D8/C8
9	Less Cost of goods sold	320000	245000	75000	30.61%	9	=B9-C9	=D9/C9
10	GROSS PROFIT	310000	315000	-5000	-1.59%	10	=B10-C10	=D10/C10
11	Less Expenses from ordinary activities					11		
12	SELLING AND DISTRIBUTION					12		
13	Wages – sales	75000	55000	20000	36.36%	13	=B13-C13	=D13/C13
14	Rent – showroom	39000	39000	0	0.00%	14	=B14-C14	=D14/C14
15	Advertising and promotion	56000	56000	0	0.00%	15	=B15-C15	=D15/C15
16	Total selling and distribution	170000	150000	20000	13.33%	16	=B16-C16	=D16/C16
17	GENERAL AND ADMINISTRATIVE					17		
18	Telephone	9000	3200	5800	181.25%	18	=B18-C18	=D18/C18
19	Depreciation – furniture and fixtures	150	100	50	50.00%	19	=B19-C19	=D19/C19
20	Depreciation – equipment	260	200	60	30.00%	20	=B20-C20	=D20/C20
21	Depreciation – motor vehicle	5000	5000	0	0.00%	21	=B21-C21	=D21/C21
22	Depreciation – building	25000	3500	21500	614.29%	22	=B22-C22	=D22/C22
23	Wages	34700	22200	12500	56.31%	23	=B23-C23	=D23/C23
24	Postage	3480	1500	1980	132.00%	24	=B24-C24	=D24/C24
25	Insurance	2410	4300	-1890	-43.95%	25	=B25-C25	=D25/C25
26	Loss by theft	0	5000	-5000	-100.00%	26	=B26-C26	=D26/C26
27	Total general and administrative	80000	45000	35000	77.78%	27	=B27-C27	=D27/C27
28	FINANCE					28		
29	Interest on loan	2000	500	1500	300.00%	29	=B29-C29	=D29/C29
30	Bad debts	3000	1500	1500	100.00%	30	=B30-C30	=D30/C30
31	Total finance	5000	2000	3000	150.00%	31	=B31-C31	=D31/C31
32	Total expenses from ordinary activities	255000	197000	58000	29.44%	32	=B32-C32	=D32/C32
33	NET PROFIT	\$55000	\$118000	-63000	-53.39%	33	=B33-C33	=D33/C33



Steps for horizontal analysis

- 1 Use columns D and E.
- 2 In cell D6, key in the formula = B6-C6. The result of this formula will be the dollar value increase (decrease) that has occurred for this item since the previous year's result.
- 3 In cell E6, key in the formula =D6/C6. The result of this formula is the percentage increase (decrease). It calculates as a percentage of last year's figure what the increase (decrease) is in the current year.
- 4 Format this cell to a percentage using the % icon on the toolbar (or some other method).
- 5 Format the cell to two decimal places using the 'Increase Decimal' icon on the toolbar.
- 6 Highlight cells D6 and E6 and copy them down to row 33. As each formula needs to be relative to the values to the left of it, the cell references in the formulas are left as relative cell references.
- 7 Delete cells opposite headings that show 0.

Zeros (0s) in analysis

On occasions, horizontal analysis will give the result as #DIV/0! This is an error message that is returned when dividing by zero. An if/then statement can be used to calculate the percentage increase or decrease, rather than the more simple division formula, which in example 6 was D6/C6. The formula in column E could be:

=IF(C6=0,100%,D6/C6)

This formula means, if the value in C6 is equal to zero, then put 100% in this cell; otherwise, divide the value in D6 by the value in C6 and return that value in this cell.

This formula overcomes the problem created if the value of an item in the preceding year's report is zero, allowing the percentage increase to be 100% in such cases.

Note that zeros for values in the following year do not return an error message (see row 26 in example 6) and a zero value increase or decrease does not affect the percentage calculation (see row 21).



Helpful hints

- In order to see the negative figures more clearly, change the format of columns D and E so that negative figures are shown in red and with brackets.
- Errors can often be made by mixing up the columns when determining the increase (decrease) value, because the most recent year is shown to the left of the preceding year's figures. Do a mental check with the first increase or decrease calculated. For example, cash sales in 2009 were \$80 000, while in 2010 they were \$110 000. The figure in 2010 is an increase on the preceding year's value. Therefore, the result in the increase (decrease) column should be positive.

EXAMPLE 9

Using the end-of-period financial reports prepared for E Coaldrake currently in the worksheet named BS, horizontal analysis is performed on the balance sheet. The balance sheet shows the dollar increase (decrease) from the preceding year to the following, with the difference shown as a percentage. Follow the same steps given for horizontal analysis in the income statement.

	A	B	C	D	E		D	E
1	E Coaldrake							
2	Comparative balance sheet							
3	as at 30 June							
4		2010	2009	Increase (Decrease)	Percent change		Increase (Decrease)	Percent change
5	Assets	\$	\$					
6	<i>Current assets</i>							
7	Bank	70000	108000	-38000	-35.19%		=B7-C7	=D7/C7
8	Accounts receivable	200000	220000	-20000	-9.09%		=B8-C8	=D8/C8
9	Inventories	40000	60000	-20000	-33.33%		=B9-C9	=D9/C9
10	Prepaid expenses	1000	3590	-2590	-72.14%		=B10-C10	=D10/C10
11	Total current assets	311000	391590	-80590	-20.58%		=B11-C11	=D11/C11
12	<i>Non-current assets</i>							
13	Furniture and fixtures	15000	7500	7500	100.00%		=B13-C13	=D13/C13
14	Less Accumulated depreciation	-300	-150	-150	100.00%		=B14-C14	=D14/C14
15	Equipment	45000	30000	15000	50.00%		=B15-C15	=D15/C15
16	Less Accumulated depreciation	-760	-500	-260	52.00%		=B16-C16	=D16/C16
17	Motor vehicle	130000	150000	-20000	-13.33%		=B17-C17	=D17/C17
18	Less Accumulated depreciation	-45000	-40000	-5000	12.50%		=B18-C18	=D18/C18
19	Building	520000	520000	0	0.00%		=B19-C19	=D19/C19
20	Less Accumulated depreciation	-175000	-150000	-25000	16.67%		=B20-C20	=D20/C20
21	Investments	475000	212000	263000	124.06%		=B21-C21	=D21/C21
22	Total non-current assets	963940	728850	235090	32.25%		=B22-C22	=D22/C22
23	Total assets	\$1274940	\$1120440	154500	13.79%		=B23-C23	=D23/C23
24	Liabilities and equity							
25	<i>Current liabilities</i>							
26	Accounts payable	238000	200000	38000	19.00%		=B26-C26	=D26/C26
27	GST clearing	-1000	-500	-500	100.00%		=B27-C27	=D27/C27
28	Accrued expenses	12000	20000	-8000	-40.00%		=B28-C28	=D28/C28
29	Total current liabilities	249000	219500	29500	13.44%		=B29-C29	=D29/C29
30	<i>Non-current liabilities</i>							
31	Loan (1/12/2015)	300000	210000	90000	42.86%		=B31-C31	=D31/C31
32	Mortgage (maturity date 1/2/2015)	150000	170000	-20000	-11.76%		=B32-C32	=D32/C32
33	Total non-current liabilities	450000	380000	70000	18.42%		=B33-C33	=D33/C33
34	Total liabilities	699000	599500	99500	16.60%		=B34-C34	=D34/C34
35	Equity							
36	Capital	520940	402940	118000	29.28%		=B36-C36	=D36/C36
37	Add Net profit	55000	118000	-63000	-53.39%		=B37-C37	=D37/C37
38	Total equity	575940	520940	55000	10.56%		=B38-C38	=D38/C38
39	Total liabilities and equity	\$1274940	\$1120440	154500	13.79%		=B39-C39	=D39/C39
40								

Review & practice 10

Prepare a horizontal analysis of the financial reports of M Schroder, trading as Happy Bots Nursery Supplies, for 2010 and 2009. These statements are shown in review & practice 9 on page 627.

Combining vertical and horizontal analysis

Hint: Do the horizontal analysis first, and then insert columns C and E and complete the vertical analysis.

Once familiar with the techniques of vertical and horizontal analysis, it is preferable to do both in the one worksheet, as illustrated below. The same technique would apply to the balance sheet.

Example 10 shows both forms of analysis in the income statement.

EXAMPLE 10

	A	B	C	D	E	F	G
1	E Coaldrake						
2	Comparative income statement						
3	for the year ended 30 June						
4		2010		2009		Increase (Decrease)	Percent change
5	Sales	\$		\$			
6	Cash	110000	17.46%	80000	14.29%	30000	37.50%
7	Credit	520000	82.54%	480000	85.71%	40000	8.33%
8		630000	100.00%	560000	100.00%	70000	12.50%
9	Less Cost of goods sold	320000	50.79%	245000	43.75%	75000	30.61%
10	GROSS PROFIT	310000	49.21%	315000	56.25%	-5000	-1.59%
11	Less Expenses from ordinary activities						
12	<i>SELLING AND DISTRIBUTION</i>						
13	Wages – sales	75000	11.90%	55000	9.82%	20000	36.36%
14	Rent – showroom	39000	6.19%	39000	6.96%	0	0.00%
15	Advertising and promotion	56000	8.89%	56000	10.00%	0	0.00%
16	Total selling and distribution	170000	26.98%	150000	26.79%	20000	13.33%
17	<i>GENERAL AND ADMINISTRATIVE</i>						
18	Telephone	9000	1.43%	3200	0.57%	5800	181.25%
19	Depreciation – furniture and fixtures	150	0.02%	100	0.02%	50	50.00%
20	Depreciation – equipment	260	0.04%	200	0.04%	60	30.00%
21	Depreciation – motor vehicle	5000	0.79%	5000	0.89%	0	0.00%
22	Depreciation – building	25000	3.97%	3500	0.63%	21500	614.29%
23	Wages	34700	5.51%	22200	3.96%	12500	56.31%
24	Postage	3480	0.55%	1500	0.27%	1980	132.00%
25	Insurance	2410	0.38%	4300	0.77%	-1890	-43.95%
26	Loss by theft	0	0.00%	5000	0.89%	-5000	-100.00%
27	Total general and administrative	80000	12.70%	45000	8.04%	35000	77.78%
28	<i>FINANCE</i>						
29	Interest on loan	2000	0.32%	500	0.09%	1500	300.00%
30	Bad debts	3000	0.48%	1500	0.27%	1500	100.00%
31	Total finance	5000	0.79%	2000	0.36%	3000	150.00%
32	Total expenses from ordinary activities	255000	40.48%	197000	35.18%	58000	29.44%
33	NET PROFIT	\$55000	8.73%	\$118000	21.07%	-63000	-53.39%

A similar analysis for the income statement is shown in example 12 on page 639, with internal benchmarks applied for directing the analysis of the reports.

Trend analysis

Trend analysis is a useful tool, because it can reveal patterns that may develop over time but which are not easily detected in the short term.



Trend analysis is a technique used to analyse items and/or groups of items over three or more years.

This type of analysis needs historical data from a number of previous years. It is often presented in graphical form so that trends can easily be seen. Information presented in graphical form is a powerful medium of communication that can enhance the interpretation of information.

This analysis is applied in example 11.

EXAMPLE 11

The following data on net profit and expenses has been collected for E Coaldrake's business for the past five years.

	2006	2007	2008	2009	2010
Expenses from ordinary activities					
Total selling and distribution	14.87%	15.69%	18.75%	26.79%	26.98%
Total general and administrative	5.54%	7.50%	9.98%	8.04%	12.70%
Total finance	0.12%	0.23%	0.25%	0.36%	0.79%
Net profit	18.54%	22.57%	28.25%	21.07%	8.73%

The data given is expressed as a percentage of net sales. This gives some basis on which to compare the various figures, because the raw data in dollars may be misleading when compared from year to year.

Trends in net profit 2006 to 2010

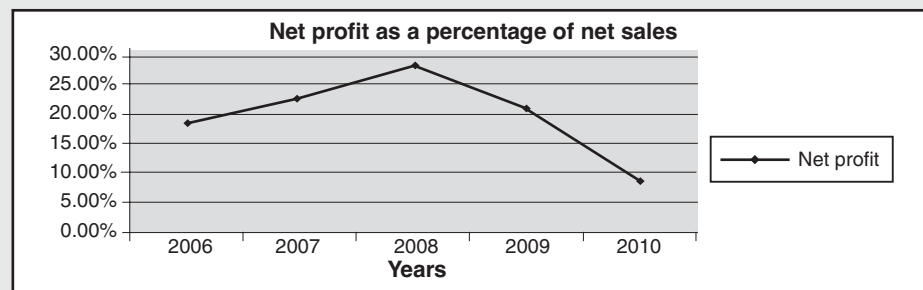
The following data is selected to produce the graph in [12.24]:

	2006	2007	2008	2009	2010
Net profit	18.54%	22.57%	28.25%	21.07%	8.7%

The simple line graph in [12.24] clearly shows that net profit, expressed as a percentage of the year's net sales, is on a downward trend.

Learning objective 4

[12.24]

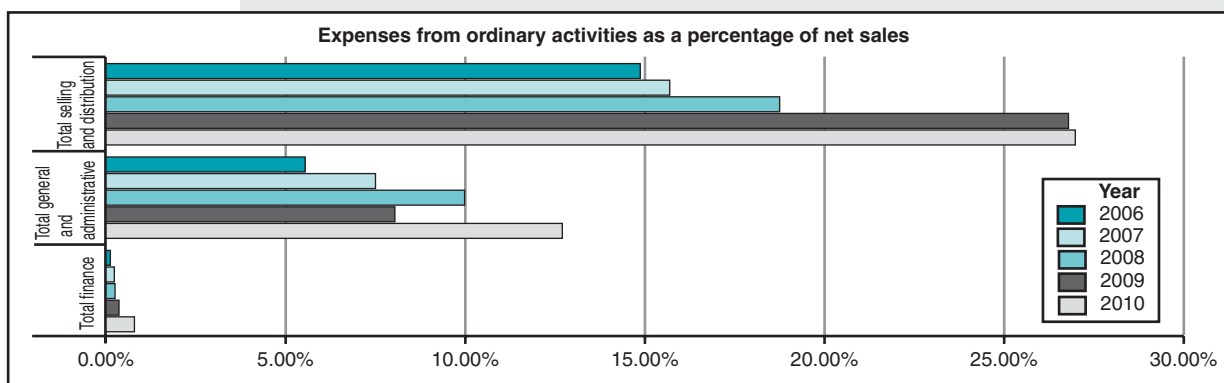


Trends in expenses from ordinary activities 2006 to 2010

In order to compare each category of operating expenses over the five years, the following data is selected to create the line graph in [12.25].

	2006	2007	2008	2009	2010
Total selling and distribution	14.87%	15.69%	18.75%	26.79%	26.98%
Total general and administrative	5.54%	7.50%	9.98%	8.04%	12.70%
Total finance	0.12%	0.23%	0.25%	0.36%	0.79%

[12.25]



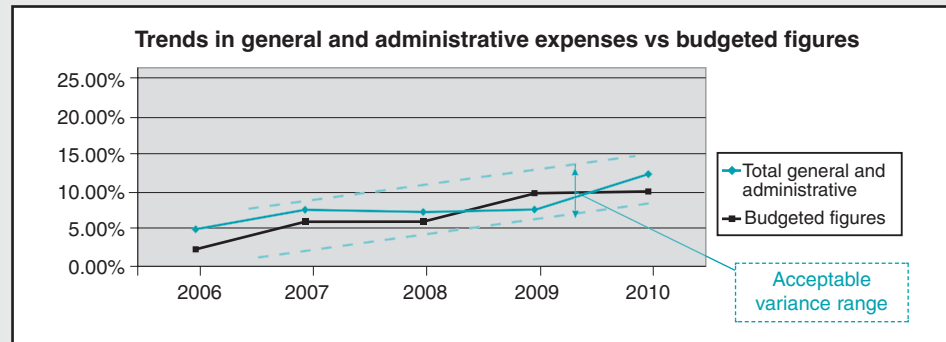
The trend in graph [12.25] indicates that finance expenses are increasing continuously, as are selling and distribution expenses, especially in the final two years. The general and administrative expenses have shown a steady increase in all years except 2009, when they fell.

Trends in general and administrative expenses 2006 to 2010

To focus on the general and administrative expenses over the five years, the following data is selected to create the graph in [12.26]. Drawing tools are then added to show the parameters within which this category of expenses is acceptable.

	2006	2007	2008	2009	2010
Total general and administrative	5.54%	7.50%	9.98%	8.04%	12.70%
Budgeted figures	2.55%	5.54%	5.58%	9.87%	10.24%

[12.26]



Review & practice 11

Using the following information, prepare a trend analysis in graphical form to reveal trends in:

- | | |
|--|---|
| a net profit | d finance expenses |
| b selling and distribution expenses | e total expenses from ordinary activities. |
| c general and administrative expenses | |

	2006	2007	2008	2009	2010
Expenses from ordinary activities					
Total selling and distribution	2.56%	2.54%	6.52%	4.25%	2.33%
Total general and administrative	14.25%	15.23%	18.66%	25.40%	19.22%
Total finance	1.88%	1.57%	1.55%	1.27%	1.96%
Net profit	16.94%	22.27%	27.75%	23.33%	33.02%

► Exercises 12.29 to 12.32, pages 664–5

Limitations of ratios as analytical tools

Learning objective 7 Ratio analysis has limitations in its usefulness and must be used with caution. By themselves, ratios are neutral. They must be compared with other ratios to give useful information. The limitations of the tool are twofold:

- they are based on financial data, which has limitations
- they have their own inherent limitations.

General limitations or restrictions are inherent in the nature of the financial ratios themselves. These are:

Reliability of interpretation The results of ratio analysis and the interpretation of these results reflect only the accuracy of the data and the reasoning behind why the ratio should be calculated. Therefore, ratios should be verified to justify the findings and to rely on the interpretation subsequently made.

Need for benchmarks Ratios used in isolation may be misleading. All ratios need to be categorised as 'favourable' or 'unfavourable', which assumes there are benchmarks from which ratios are judged. There are generally five benchmarks used to measure and interpret the ratios of an enterprise:

- generally accepted rules of thumb
- goals based on a previous period's results
- the trend recognised from a number of previous years' ratios
- benchmark ratios for the industry
- benchmark ratios for other industries.

Past is used to predict the future The interpretation of the end-of-period reports based on ratio, trend and horizontal analysis is prepared so that decisions about future directions can be made. Ironically, the future directions are based on information that is historical data. Economic trends, as well as other factors such as the business's leadership and government legislation, may also affect the results.

Changes in the enterprise's current directions If an enterprise expands by purchasing another business, there may be a change in direction for the enterprise. Therefore, a normal ratio analysis may be unsuitable unless allowances are made for the impact of the changes. In these situations, additional information should be sought.

Comparison of different businesses Comparability is desirable between similar businesses in the same industry, and various statutory, professional and stock exchange requirements may ensure that there is some comparability. However, not all businesses' accounts will be prepared in the same manner. This has implications for comparisons with other businesses.

Despite these limitations, ratio analysis is used extensively in accounting and gives valuable results. If the ratio analysis is used to justify decisions in business matters, then they must be used with consideration for its limitations factored into any decisions made.

Review & practice 12

- a Why** should caution be used when making decisions based on ratio analysis?
- b Why** is it that ratios calculated for one year are less useful than ratios calculated over two or more years?
- c What** are 'benchmarks'?
- d How** can ratio analysis assist a business?

Part 3 – Communicating recommendations based on financial reports

Already know

- The accounting process from source documents to end-of-period reports
- How to prepare the financial reports (classified income statement, balance sheet and cash flow statement) and the limitations of these reports
- How to calculate appropriate ratios using comparative reports of the income statement and balance sheet

Need to know

- How to make decisions and/or recommendations based on financial reports and the analysis of:
 - profitability or earning capacity
 - liquidity and financial stability
 - managerial effectiveness
 - cash flow
- How to apply benchmarks to assist analysis
- How to communicate this information to interested parties in the form of a formal or informal written report

Using this knowledge

- *Helps to evaluate performance* by comparing the results of the entity with internal and external benchmarks
- *Provides information for decision-making* by communicating this information in written reports, both formal and informal

ACCOUNTING VOCABULARY

Benchmarks
Inter-industry
Intra-entity

Intra-industry
Key performance indicators (KPIs)
Variances

Learning objectives

After completing this section, you should be able to:

- 1 interpret the analysis performed using internal benchmarks
- 2 interpret the analysis performed using external benchmarks
- 3 apply a decision-making strategy when interpreting accounting information
- 4 communicate information gleaned from the analysis and interpretation of financial information in formal or informal report formats.

Interpretation of the analysis

Learning objective 1 For the purpose of examining the figures in the reports and making informed decisions from the information gathered, a clear distinction has to be made between the terms ‘analysis’ and ‘interpretation’. This is summarised in [12.27].

[12.27]

Analysis	Interpretation
Analysis is generally an <i>objective</i> measure based on the calculation of the various ratios and percentages. For example, E Coaldrake's business shows a decrease in inventories at 30 June of 33.33%.	Interpretation is generally considered to be more <i>subjective</i> , involving judgment and decision-making based on the ratios and percentages. For example, the decrease in inventory levels could be due to an anticipated economic downturn.

Benchmarks, both internal and external, are used to make the subjective nature of interpretation more objective and to assist decision-making based on the analysis of the entity's reports.

Benchmarks for comparison

There are various types of benchmarks used in the interpretation of ratios. Objective benchmarks that are used are shown in **[12.28]**.

[12.28]

Benchmarks	Explanation
Internal Previous year's results (intra-entity)	Comparing the entity's financial results across periods to identify trends. An example of this type of benchmark is the use of comparative income statements and balance sheets
External Within the same industry (intra-industry)	Comparing the entity's ratios with ratios from other entities in the same industry
Between industries (inter-industry)	Comparing the entity's ratios with ratios from other entities in different industries
Other Other standards (set/arbitrary)	Comparing the entity's financial results to standards that have been accepted by the enterprise in the past; for example, investigating percentages above a set percentage and/or dollar figure. The basis for determining these standards may be the owner's intimate knowledge of their own business and experience in the industry

Each industry forms its own set of benchmarks collected from analysis of numerous entities within that industry. These intra-industry benchmarks then allow the entities in the industry to gauge their own performance in comparison with others in their industry. This data is collected by analysts and can be purchased by businesses that are interested in making intra-industry comparisons. Alternatively, an accountant with access to this type of data can provide benchmarks for a business.

This type of information is available from analysts for a fee, although some industry benchmarks are available on the Internet. The accuracy of a benchmark depends on how representative the results are of the industry, and this is generally due to the number of entities that have been researched to give the final benchmark figures.

The Entrepreneur Business Centre site is one source of intra-industry benchmarks. This supplier refers to KPIs, *key performance indicators*, on which business owners can focus in order to monitor their business results. The article in **[12.29]** discusses the use of benchmarks and KPIs.

Refer to
<www.ebc.com.au>.

[12.29]

Outwit, outplay, outlast ... Benchmark your business!

If you're not sure how your annual turnover compares to your competitors, whether your business is paying more rent than it should or whether your staff is over-paid (or not paid enough) then maybe you should consider benchmarking. Angela Horvat reports.

A great French writer by the name of Gustave Flaubert once said there is nothing more humiliating than to see idiots succeed in enterprises we have failed in. ...

A revolution of a different kind is sweeping through small and medium businesses where information truly is king and comes in the now-affordable form of benchmarking guides.

...

Traditionally, larger corporations predominantly reaped the rewards from the often-costly practice of benchmarking. The end result was often presented in a clear, concise 'action plan' designed to take business to a new and much more profitable level. This action plan would be based on an in-depth evaluation of the business in question, the associated industry and the best-practice marketing and advertising methods used by the specific company's competition.

Today, however, small-to-medium enterprises (SMEs) can benefit from these very same tactics once only enjoyed by their larger counterparts – at a fraction of the price.

What's in it for you?

... In essence, business owners can use their competition as the ultimate measuring stick for improvement

... Colin O'Brien – executive officer of BEC Australia ... is an expert when it comes to benchmarking. He has run his own business while advising others, and has been absorbing the knowledge-rich values of benchmarking guides for the past 25 years.

'It formed a great part of my analysis when identifying the strengths and weaknesses of a particular business.

'For example, it might be that the rent of one business makes up 13 per cent of its annual turnover, yet the benchmarking study shows that a similar-sized business in the same industry in the same area is paying 5 per cent more.' ...

What kind of information is delivered?

...

More sophisticated benchmarking analysis provides SMEs with the most commonly sought-after details.

Information varies from tiered levels of competing businesses (in terms of size and revenue), financial processes, administration, staffing and product specifics, all the way through to how much of the competition's budget is dedicated to advertising and marketing. Information can be compared to competitors on a national scale and also to those located within or close to your business area.

EBC's Hart says the strengths of benchmarking guides heavily rely on the Key Performance Indicators (KPIs). 'It is these KPIs such as total commission and income, rent of premises, percentage of income spent on wages and salaries, net profit and other financial ratios which indicate how well, or not, a firm is performing.'

Benchmarking Is it for your business?

Determining whether you should invest in benchmarking your business really depends on how well you know your business. Ask yourself the following to establish whether you're on top of your business, its associated industry and, of course, your competitors:

- Who are my most important customers and why?
- Am I spending too much on advertising (or not enough) compared to my competitors?
- How much are my competitors paying their staff (both permanent and contract)?
- What do customers expect from a business like mine?
- How much are my competitors charging for similar products?
- Which marketing techniques would best suit my business and what are my competitors doing in this area?
- Can I further streamline my products/services processes to increase my end-of-year bottom line?

Where to from here?

Generally, benchmarking guides (around 200 pages) for SMEs can range in price from \$150 to \$350 – depending on the fields and the amount of grass-root categories you're seeking. Additional software guides (which tend to assist in the planning and forecasting areas) come at an extra price (usually around \$150). Meanwhile, a number of more 'vanilla' resources and statistics can be found at the National Office of Information Economy's website: <www.noie.gov.au> (follow the SME prompts) or at the Australian Bureau of Statistics at <www.abs.gov.au>. However, for guides you can run your business numbers through, the tailored guides from FMRC (<www.fmrbenchmarking.com.au> (02) 6772 5199) and EBC (<www.ebc.com.au> 1300 300 586) seem the most popular.



AT A GLANCE: BENCHMARKING GUIDE FOR BUILDING CONTRACTORS

The table [opposite] shows the results found in this industry for various key performance indicators (KPIs). You can identify your strengths and weaknesses by comparing your business performance with the levels achieved by the sample in this survey. Guides for your particular industry may be available from the Entrepreneur Business Centre 1300 300 586.

Indicator	Average	Low	High
Materials used	37.71%	16.63%	56.71%
Subcontractors	20.42%	0.00%	41.17%
Gross profit	41.88%	13.59%	71.93%
Wages & salaries (staff only)	9.67%	0.00%	28.91%
Vehicle operating costs	3.70%	0.48%	9.39%
Net profit (bos)*	20.00%	2.74%	40.86%
Days' debtors	24	4	41
Hourly rates for trades staff	\$33	\$25	\$40

Source: EBC Business Benchmarking Guide for Building Contractors © 2001
*before owner's salaries and benefits

Source: Horvat, A 2002, My Business, October

Applying internal benchmarks

Intra-entity benchmarks

The first step in analysing financial records is to compare the entity's financial results across periods to identify trends. One application of this benchmark is a comparative income statement and balance sheet. An additional column can be added to the spreadsheet that performs the horizontal and vertical analysis of the latest year's results with the preceding year's results. This column is an analysis column and the formula is based on preset intra-entity benchmarks that will guide management in its interpretation of the statements by highlighting the results that show variances outside the expected range.

When using horizontal analysis of the financial statements, the accountant's attention is initially drawn to significant items only. The significance of an item can be expressed as a percentage and/or a dollar value (flat figure). Although a percentage change can be used as a guide, it must be considered in conjunction with a flat figure, depending on the size of the enterprise.

For example, if an expense account rose from \$20 to \$30, this would show as a flat figure increase of \$10, or a 50% increase. However, because the flat figure must be considered in addition to a percentage, such a small item would not be deemed significant. Each enterprise will have its own guidelines about what constitutes an acceptable variance.



Auditors, in their custodial role, use this technique when assessing financial information. Because of the cost factor, it is generally impractical for auditors to check every transaction in a business's records. Therefore, auditors compare the latest year's information with the preceding year's and note any high or unusual variances that indicate items that require further investigation. In addition, auditors would trace a number of randomly selected transactions through the accounting process.

**EXAMPLE 12**

For the business of E Coaldrake, the significant variance for the income statement has been determined as \$15 000, or 15%. These variances are then compared with the two columns generated by the horizontal analysis. An additional column is shown that directs the user to analyse in greater detail the amounts that are found to be significant.

Analysis column applying internal benchmarks

	A	B	C	D	E	F	G	H
1	E Coaldrake							
2	Comparative income statement							
3	for the year ended 30 June							
4		2010		2009		Increase (Decrease)	Percent change	Analyse?
5	Sales	\$		\$				
6	Cash	110000	17.46%	80000	14.29%	30000	37.50%	analyse
7	Credit	520000	82.54%	480000	85.71%	40000	8.33%	
8		630000	100.00%	560000	100.00%	70000	12.50%	
9	Less Cost of goods sold	320000	50.79%	245000	43.75%	75000	30.61%	analyse
10	GROSS PROFIT	310000	49.21%	315000	56.25%	-5000	-1.59%	
11	Less Expenses from ordinary activities							
12	<i>SELLING AND DISTRIBUTION</i>							
13	Wages – sales	75000	11.90%	55000	9.82%	20000	36.36%	analyse
14	Rent – showroom	39000	6.19%	39000	6.96%	0	0.00%	
15	Advertising and promotion	56000	8.89%	56000	10.00%	0	0.00%	
16	Total selling and distribution	170000	26.98%	150000	26.79%	20000	13.33%	
17	<i>GENERAL AND ADMINISTRATIVE</i>							
18	Telephone	9000	1.43%	3200	0.57%	5800	181.25%	
19	Depreciation – furniture and fixtures	150	0.02%	100	0.02%	50	50.00%	
20	Depreciation – equipment	260	0.04%	200	0.04%	60	30.00%	
21	Depreciation – motor vehicle	5000	0.79%	5000	0.89%	0	0.00%	
22	Depreciation – building	25000	3.97%	3500	0.63%	21500	614.29%	analyse
23	Wages	34700	5.51%	22200	3.96%	12500	56.31%	
24	Postage	3480	0.55%	1500	0.27%	1980	132.00%	
25	Insurance	2410	0.38%	4300	0.77%	-1890	-43.95%	
26	Loss by theft	0	0.00%	5000	0.89%	-5000	-100.00%	
27	Total general and administrative	80000	12.70%	45000	8.04%	35000	77.78%	analyse
28	<i>FINANCE</i>							
29	Interest on loan	2000	0.32%	500	0.09%	1500	300.00%	
30	Bad debts	3000	0.48%	1500	0.27%	1500	100.00%	
31	Total finance	5000	0.79%	2000	0.36%	3000	150.00%	
32	Total expenses from ordinary activities	255000	40.48%	197000	35.18%	58000	29.44%	analyse
33	NET PROFIT	\$55000	8.73%	\$118000	21.07%	-63000	-53.39%	analyse

	A	B	C	D	E	F	G	H
1	E Coaldrake							
2	Comparative balance sheet							
3	as at 30 June							
4		2010		2009		Increase (Decrease)	Percent change	Analyse?
5	Assets	\$		\$				
6	<i>Current assets</i>							
7	Bank	70000	5.49%	108000	9.64%	-38000	-35.19%	analyse
8	Accounts receivable	200000	15.69%	220000	19.64%	-20000	-9.09%	
9	Inventories	40000	3.14%	60000	5.36%	-20000	-33.33%	analyse
10	Prepaid expenses	1000	0.08%	3590	0.32%	-2590	-72.14%	
11	Total current assets	311000	24.39%	391590	34.95%	-80590	-20.58%	analyse
12	<i>Non-current assets</i>							
13	Furniture and fixtures	15000	1.18%	7500	0.67%	7500	100.00%	
14	Less Accumulated depreciation	-300	-0.02%	-150	-0.01%	-150	100.00%	
15	Equipment	45000	3.53%	30000	2.68%	15000	50.00%	analyse
16	Less Accumulated depreciation	-760	-0.06%	-500	-0.04%	-260	52.00%	
17	Motor vehicle	130000	10.20%	150000	13.39%	-20000	-13.33%	
18	Less Accumulated depreciation	-45000	-3.53%	-40000	-3.57%	-5000	12.50%	
19	Building	520000	40.79%	520000	46.41%	0	0.00%	
20	Less Accumulated depreciation	-175000	-13.73%	-150000	-13.39%	-25000	16.67%	analyse
21	Investments	475000	37.26%	212000	18.92%	263000	124.06%	analyse
22	Total non-current assets	963940	75.61%	728850	65.05%	235090	32.25%	analyse
23	Total assets	\$1274940	100.00%	\$1120440	100.00%	154500	13.79%	
24	Liabilities and equity							
25	<i>Current liabilities</i>							
26	Accounts payable	238000	18.67%	200000	17.85%	38000	19.00%	analyse
27	GST clearing	-1000	-0.08%	-500	-0.04%	-500	100.00%	
28	Accrued expenses	12000	0.94%	20000	1.79%	-8000	-40.00%	
29	Total current liabilities	249000	19.53%	219500	19.59%	29500	13.44%	
30	Non-current liabilities							
31	Loan (1/12/2015)	300000	23.53%	210000	18.74%	90000	42.86%	analyse
32	Mortgage (maturity date 1/2/2015)	150000	11.77%	170000	15.17%	-20000	-11.76%	
33	Total non-current liabilities	450000	35.30%	380000	33.92%	70000	18.42%	analyse
34	Total liabilities	\$699000	54.83%	\$599500	53.51%	99500	16.60%	analyse
35	Equity							
36	Capital	520940	40.86%	402940	35.96%	118000	29.28%	analyse
37	Add Net profit	55000	4.31%	118000	10.53%	-63000	-53.39%	analyse
38	Total equity	575940	45.17%	520940	46.49%	55000	10.56%	
39	Total liabilities and equity	\$1274940	100.00%	\$1120440	100.00%	154500	13.79%	
40								

IS BS **RATIO**

In column H, preset intra-entity benchmarks have been applied to make a decision as to whether or not the line item in the financial report should be analysed. The benchmark variances are compared with those expressed in the analysis in both dollar and percentage variances. The benchmarks determined appropriate for Coaldrake's balance sheet are \$15 000 and 15%. These benchmarks would be set within each entity and are based on a knowledge of the entity and previous variances. They can be changed easily within the spreadsheet as they are cell referenced from column I (see cutout below). The figures considered appropriate as a significant variance (in dollars and percentage) are pre-determined intra-entity benchmarks. Such flexibility aids timely decision-making.

Internal benchmarks set
to check variances in
both \$s and %s

E	F	G	H	I	J
	Increase (Decrease)	Percent change	Analyse?	15000 15%	Significant variance \$ Significant variance %
9.62%	-38000	-35.19%	analyse		
19.59%	-20000	-9.09%			
0.22%	2500	100.00%			

The formula based on the preset intra-entity benchmarks shown above, which would be contained in the H column, is shown below and is dissected into its component parts.

	H	I	J
4	Analyse?	15000	Significant variance \$
5		15%	Significant variance %
6	=IF(AND(OR(F6>=\$I\$4,F6<=-\$I\$4),(OR(G6>=\$I\$5,G6<=-\$I\$5))), "analyse", "")		
7	=IF(AND(OR(F7>=\$I\$4,F7<=-\$I\$4),(OR(G7>=\$I\$5,G7<=-\$I\$5))), "analyse", "")		
8	=IF(AND(OR(F8>=\$I\$4,F8<=-\$I\$4),(OR(G8>=\$I\$5,G8<=-\$I\$5))), "analyse", "")		
9	=IF(AND(OR(F9>=\$I\$4,F9<=-\$I\$4),(OR(G9>=\$I\$5,G9<=-\$I\$5))), "analyse", "")		

Naming cells is another way of making a cell absolute. It is also easier to see what the cell is referring to in the formula.

The IF/AND/OR formula

The formula in column H of example 12

=IF(AND(OR(F6>=\$I\$4,F6<=-\$I\$4),(OR(G6>=\$I\$5,G6<=-\$I\$5))), "analyse", " ")

↑
Positive \$
variance
↑
Negative \$
variance
↑
Positive %
variance
↑
Negative %
variance
↑
True
↑
False

means

IF (this is true)

the value in F6 is greater than or equal to the value in I4 OR if the value in F6 is negative and less than or equal to the negative value in I4

AND

If the value in G6 is greater than or equal to the value in I5 OR if the value in G6 is negative and less than or equal to the negative value in I5

THEN

Return the word 'analyse'

Otherwise it must be false, so return a blank " "

Applying external benchmarks

Learning objective 2

Table [12.30] both summarises the ratio analysis performed for E Coaldrake's business and gives appropriate benchmarks that allow comparisons to be made.

[12.30]

Broad area of analysis	Ratio	Calculation	2010 Ratio result	2009 Ratio result	Benchmark Industry average
Profitability ratios	Gross profit ratio	$\frac{\text{Gross profit}}{\text{Net sales}}$	49.21%	56.25%	47%
	Net profit ratio	$\frac{\text{Net profit}}{\text{Net sales}}$	8.73%	21.07%	12.55%
	Return on equity ratio	$\frac{\text{Net profit}}{\text{Average owner's equity}}$	10.03%	25.54%	7.30%
	Return on total assets ratio	$\frac{\text{Net profit}}{\text{Average total assets}}$	4.58%	10.02%	3.00%
Effectiveness of management policies	Turnover of inventories rate	$\frac{\text{Cost of good sold}}{\text{Average inventory}}$	57 days	74 days	60 days
	Turnover of accounts receivable rate	$\frac{\text{Average accounts receivable}}{\text{Net credit sales}}$	147 days	160 days	45 days



Financial stability (liquidity ratios)	Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	1.24:1	1.78:1	1.52:1
	Quick ratio	$\frac{\text{Current assets} - (\text{Inventories} + \text{Prepayments})}{\text{Current liabilities} - \text{Bank overdraft}}$	1.08:1	1.49:1	1.10:1
	Debt ratio	$\frac{\text{Total liabilities}}{\text{Total assets}}$	45.00%	46.39%	63.16%
	Equity ratio	$\frac{\text{Total owner's equity}}{\text{Total assets}}$	55.00%	53.61%	36.84%

► Exercises 12.35 to 12.37, page 666

Strategy for interpreting financial reports

A process can be followed when interpreting financial results and communicating the information to a sole trader, who will then evaluate the information and use it for making decisions about the business. This process is summarised in the following four steps.

Learning objective 3



Steps for decision-making in accounting

- 1 Collecting and organising relevant data
- 2 Analysing and interpreting the data
- 3 Making and justifying decisions
- 4 Evaluating and assessing decisions made

Each of these steps will be considered for the business of E Coaldrake.

Step 1



Collecting and organising relevant data

The following relevant data can be collected for E Coaldrake's business:

- income statement (page 617)
- balance sheet (page 618)
- vertical analysis (pages 625–6)
- horizontal analysis (pages 628 and 630)
- trend analysis (pages 632–3)
- application of internal benchmarks (page 639)
- ratio analysis with external benchmarks (pages 641–2)

Step 2



Analysing and interpreting the data

Horizontal and vertical analysis

Scan the vertical analysis columns for both years to determine if any amounts within any categories stand out as being markedly increased or decreased. The vertical analysis columns show the gross and net profit margins at a glance and

these can be compared with those for the preceding year. These columns also show the percentage of sales that each category of expenses represents. Monitor the increase in expense categories carefully, because these have the greatest impact on net profit.

Having applied internal benchmarks to the horizontal analysis in the reports, the more important changes in the results between the two periods being analysed are clearly indicated. Concentrate on these items and look for possible errors in the financial results. For example, the horizontal analysis of the depreciation expense for building indicates an increase of 614.29%. Clearly, this requires investigation. Has the asset increased during the period to warrant this increase? The balance sheet shows no increase in the asset. Further investigation would be required to determine if this amount is in error, or if there has been a change in policy or method of calculation of the depreciation that explains this sudden increase outside what would be considered a normal range. This change would be highlighted in the report to be prepared.

Trend analysis

The trend analysis for E Coaldrake indicates a decreasing net profit position. Expense categories have generally risen steadily over the past five years. These two trends would need to be investigated further and corrective action taken to halt the downward slide of the net profit.

Ratio analysis

Use the ratio analysis to interpret data in two ways:

- 1 through comparison with the previous financial period's ratios
- 2 comparison with industry standards.

In making both these comparisons, the analyst can determine if the most recent year's results are an overall improvement on past results or if the business is performing poorly in comparison with past results. The latter may be the case, but comparison with a benchmark may reveal that the business is not performing poorly on an industry-wide level.

Step 3



Making and justifying decisions

What are some of the decisions that are based on the financial information in the end-of-period reports? These decisions depend on the user of the reports and the user's particular focus. Table [12.31] details:

- 1 the parties who would have access to the sole trader's reports, and would be interested in the financial reports
- 2 the decisions they may have to make based on this information.

Note that although other interested parties have been listed in [12.1] on page 593, the focus here is on the actual financial reports of the enterprise. A proprietor closely guards these 'financials' because the information is of a personal nature (due to taxation of the profits) and would be of considerable interest to a competitor.

[12.31]

Category	Interested party	Factors to consider	Decision/s to be made	Analysis used to assist decision-making
Resource providers	Owner/management	Return on investment	Sell business, retain or increase investment.	<ul style="list-style-type: none"> Gross profit ratio Net profit ratio Return on equity ratio Return on total assets ratio Vertical and horizontal analysis Comparisons with budgeted figures
	Lenders/banks	Short-term liquidity and long-term financial solvency	Will the principal amount lent be repaid with interest? Provide, withdraw or refuse future loan requests.	<ul style="list-style-type: none"> Current ratio Quick ratio Equity ratio Debt ratio
External parties	Accountant/auditor	Taxation and other compliance issues	How much tax is to be paid by the proprietor of this business? Has the business's BAS been submitted monthly/quarterly?	<ul style="list-style-type: none"> Vertical analysis Horizontal analysis Ratio analysis Trend analysis Other managerial accounting calculations such as break-even analysis Analysis of GST receivable and GST payable accounts
	Regulatory agencies	Accuracy of information for tax assessment. Compliance with workplace health and safety and environmental requirements	Does the entity comply with all legal requirements?	<ul style="list-style-type: none"> Compliance audits may be conducted, e.g. tax audit for income tax or GST, workplace health and safety and environmental audits

Step 4



Evaluating and assessing decisions made

The information in the analysis and interpretation of the financial reports is now evaluated. Previous plans are used to make an evaluation of whether or not the business is achieving its goals. Decisions must be taken to address any areas of concern and to plan future growth.

Once decisions have been made in the light of the analysis undertaken, they must be carefully implemented. The implementation must not conflict with the aims and objectives of the overall strategic plan of the business.

Budgeted figures are evaluated by matching them against actual figures. Although not covered in this text, budgeted figures would also be prepared for the income statement. These budgeted statements would be used for evaluative purposes.

All changes must be evaluated and assessed. Therefore, businesses must identify and develop a specific plan to achieve this evaluation. For example, some businesses will have a long-term goal with short-term aims to help achieve the long-term goal. In such instances, the short-term aims must be attached to a specific time and a benchmark. The evaluation of the achievement of these short- and long-term goals would be measured by comparison against these benchmarks.

Review & practice 13

Read the article 'Roadmap to success!' and answer these questions:

- a** **Why** should business owners plan?
- b** **Why** is it that a business can be profitable and yet have to close due to a lack of cash flow, as suggested under the heading 'February'?
- c** **Which** analysis would you suggest be used by a business owner following this 'roadmap'?

Roadmap to success!

January: plan or perish

We know that the top quartile of businesses in any industry sector will have a higher rate of success where the owners or management operate under a documented business plan. A lack of forward thinking and planning is a key determinate for business failure and limits a business's capacity to grow and prosper.

Business plans – why bother?

Planning sets out a clear path ahead.

- It helps determine the viability of your business.
- It helps you anticipate problems and future needs. You can then plan ahead to meet these needs instead of being caught out.
- It allows you to test and examine your ideas on paper before making them reality.
- It indicates to others your ability and commitment, not to mention your professionalism – a must-have when dealing with banks and other lenders.

So, develop your strategy, tie it to the numbers and then get everyone involved. You now have a map for the future.

February: is the cash flowing?

Knowing how to manage and maintain a healthy cash flow is essential to the survival and growth of your business.

...

February is often the worst cash flow month for small-to-medium enterprises (SMEs).

Many SMEs will be feeling the pinch of a tight cash flow period.

...

Cash may be slowing and the expenses starting to run again. You need to ensure your collections are well-managed ...

March: don't pay more than you have to

There are many ways you can reduce your FBT (fringe benefits tax) payments without significantly changing the benefits provided to your staff. Now is a good time to review everything and spend some time with your accountant both quantifying your likely FBT position and what planning options are available to you.

April: managing your business capacity

... Are you meeting your budgets, is growth occurring, are there new projects? These are just some of the things you should be forming a view on. And once you do it is important to have a look at your resources and see if they are matched to what is happening in your business. Do you have the right amount of space; do you have enough people resources; can your equipment meet your business needs and do you have enough stock to service your growth or change?

...

In the process don't forget your people. They are probably one of your most valuable resources. You need to review their performance and progress and provide them with some feedback. Amongst all of this remember your March quarter BAS.

May: taxing times

Tax time is just around the corner ... Make sure you have these areas covered in your year-end tax planning:

- Physically write-off any bad debts before the end of the financial year.
- Review your asset register and write off any assets that have been scrapped. You may find a few of these sitting on your depreciation schedule.
- Have a look at whether or not it would be an advantage to make any prepayments.



- Do you want to make any further contributions to your superannuation fund?
- If you need to purchase some consumables it may be a good idea to buy these before the end of June.
- If you are planning to pay any staff bonuses consider whether it would be better to do this before financial year-end.
- Have a look at your trading stock. Is there any stock that is obsolete or should be scrapped? If there is, deal with it before the end of June.

This list is not comprehensive but covers a number of areas worth reviewing. In any planning make sure you consider both the tax and cash flow impact.

June: another tax year!

The financial year is about to end ... Often when any major tax changes occur they come with the new financial year ... And keep in mind the existing tax options that are available to your business. Things like the Simplified Tax System (STS) or the small business capital gains tax concessions.

Do they present you with some opportunities? ...

July: be on top of the new financial year

Start the year the right way. And this means having your budgets and cash flow projections in place for the coming year. Have the year mapped out financially and make sure you know what the operating and cash flow cycles are going to be ...

August: time to get the numbers in place

... Your financial statements for the year should be starting to come together. Get this job out of the way while things are fresh in everyone's minds ...

September: have you got your finances right?

... Do you have your borrowings structured the right way? When answering this question think about these areas:

- the stage of life your business is at
- use your money or borrow
- only borrow what you have the capacity to repay
- match your type of borrowing to the purpose the funds are to be used for.

Debt restructuring allows you the opportunity to 're-time' your funding and also allows you to consolidate debt. When planning debt restructure, the critical thing is to ensure you include all commitments. ... if you want change in place by the end of the year, now is the time to start working on this.

October: compliance time and a quick health check

You've completed the first quarter of the financial year so it's not a bad time to do a review of how you are traveling against your budgets and cash flow ... Are there any changes needed?

... Christmas is fast approaching. Do you want to do anything to get your business ready for the season? Stock, staffing, promotional activity ... the list goes on. Don't leave it too late to prepare.

November: staying on top

... Look closely at your debtors and stock management. If there is any fine-tuning required before year-end then now is probably your last opportunity.

Working capital often skews around near the end of the year. Everyone is chasing their debtors and trying to get the money in to cover any extra costs that come along ...

For some businesses, what you don't get organised now won't happen before February next year. It's a long time to wait.

December: another year gone!

Christmas is almost here. If it's peak season, make the most of it. This is the time when you want to maximise your sales advantage, but remember, don't give away too much of your profits in discounts.

...

Greg Hayes is a senior partner of accounting and business advisory firm Hayes Knight.

Source: Hayes, G 2002/2003, My Business, December/January.

Communicating the results of analysis and interpretation

Learning objective 4

See chapter 9 for more on informal reports and the structure of reports.

Written reports may be either informal or formal. This section contains a formal report based on the ratio, vertical, horizontal and trend analysis of E Coaldrake's business.

Formal reports

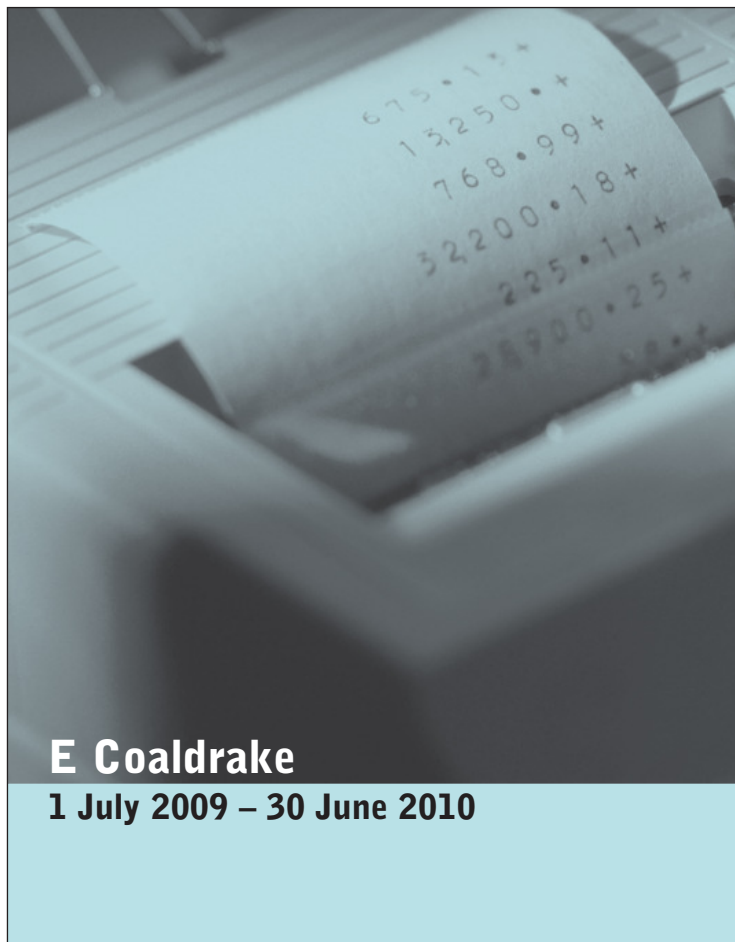
Written reports based on the financial results of a business are a combination of words, figures and graphics. The best example of financial reports in a formal format is the annual report of a corporate entity. These are now readily available on the Internet, as most public companies seek to give the public, and their shareholders in particular, quick and easy access to their published financial information.

Incorporating graphic information is an excellent method for showing comparative information in a visual manner. Written reports with graphics are often more readable than reports with only numbers and words.

The following report is an example of a formal report. It has been prepared for E Coaldrake. It analyses and interprets the financial reports for the period 2009 to 2010, and makes recommendations for improvements based on the figures presented in this report.

The layout shown here is only one example of a formal report. Refer to chapter 9 for details on how to structure and write a formal report.

Cover



Title page

Analysis and interpretation
of the end-of-period financial
reports of
E Coaldrake
for the period
1 July 2009 to 30 June 2010
by K McSporran, CPA

Executive summary

E Coaldrake's business is operating at an acceptable level. The business generally compares favourably with other industries of the same nature. The business's performance has decreased in most areas in comparison with its excellent results in the previous year.

Analysis on the income statement and balance sheet has been carried out using the following analytical techniques: ratio, vertical, horizontal and trend analysis.

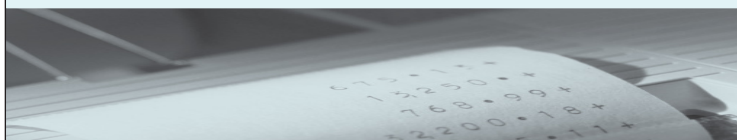
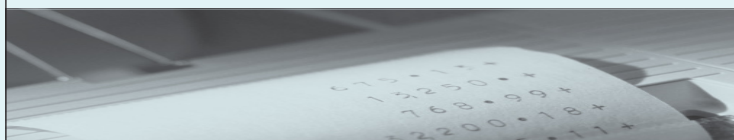
The decline in profit has been expected due to the current economic climate, but there are a number of areas of concern that need to be addressed. The most important of these are the decline in net profit despite an increased turnover of inventories and a continued poor performance in credit management.

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Body text

1 Introduction

This report has been commissioned to provide an independent assessment of E Coaldrake's business for prospective purchasers of this going concern.

The report intends to present an overview of the past performance of E Coaldrake's business over the previous accounting period and to assess the current financial position of this enterprise. While the scope of this report is mainly the financial results of the 2009/2010 financial year, some results from the previous four years have been used to gauge the trends occurring in this business. Where appropriate, results have been benchmarked against industry standards to give a better assessment of the performance and standing of this business within the industry.

The financial position of E Coaldrake has been assessed for the period 1 July 2009 to 30 June 2010. This report will focus on three main areas of analysis:

- profitability
- effectiveness of management policies
- financial stability.

Commonly accepted ratios have been performed within the categories given above. Vertical, horizontal and trend analysis has been performed on the income statement and balance sheet. In the light of the business's policy of using internal benchmarks, these have been applied with respect to significant variances in figures in the current year's reports. Therefore, figures that have varied by \$15 000 or more and by 15% or more are investigated.

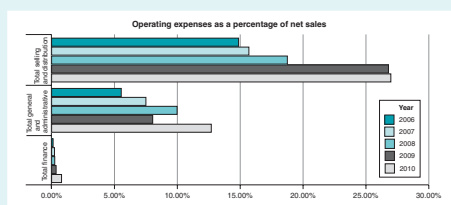
1

The increased cost of goods sold, which has been discussed previously in relation to the gross profit ratio, has had further impact on the net profit. The margin on sales has not taken into account the increased costs of the goods, or of other operating expenses. The expenses which need to be analysed are wages and depreciation on building. Two further expenses, which escape being identified due to the benchmarks which have been set but which could be investigated, are postage and telephone expenses. These have more than doubled.

An overall increase of 29.44% in ordinary expenses has led to a decrease in net profit of more than 53%. This must be addressed, and quickly. The fact that sales – both cash and credit – increased over the same period must not be ignored. There is obviously potential to improve profit, but action needs to be taken to curb expenditure.

The ordinary expenses shown in Figure 2 below highlight the growth in general and administrative expenses over the past year and indicate the need to reign in these expenses.

Figure 2
Ordinary expenses
expressed as a
percentage of total
sales



3

2 Analysis and interpretation

2.1 Profitability

2.1.1 Gross profit

This ratio indicates that, for every dollar of sales, 49 cents represents gross profit.

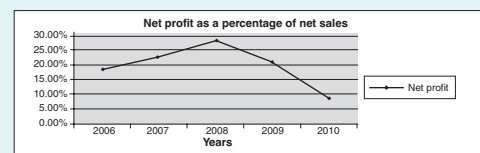
The gross profit ratio has declined since the previous year but is still acceptable given industry standards. Gross profit decreased by 1.59% despite an increase in sales overall of 12.5%. The decrease in the gross profit ratio is due to the increase in cost of goods sold of 30.61%.

The increased sales activity would have warranted an increase in the purchase of inventories, but were these inventories correctly priced? The selling price margin may need to improve to generate a higher gross profit. A price rise such as this would have to be considered in the light of the current economic and market conditions.

2.1.2 Net profit

The net profit ratio has experienced a serious decline from 21% to 8.7%, as indicated in Figure 1 below. This indicates that for every dollar of sales, almost nine cents is returned as profit whereas in the previous accounting period it was 21 cents in every sales dollar.

Figure 1
Net profit shown as a
percentage of net sales



2

2.1.3 Return on equity

The return to the owner of 10% is very healthy. Although less than half the return of the previous year, it is more than favourable when compared with the return on similar businesses in the industry. The best indication of whether or not this return is effective is to compare it with current rates of interest on less risky investments such as government bonds. As the current rate is less than 5%, it is considered that the owner's return on investment is very good and that the owner should maintain their investment in this business.

2.1.4 Return on assets

The fall in profit in this financial period has had an impact on the return generated by the assets used by the business to generate its revenue. Considerable increases in costs have led to a more depressed return on assets and net profit is considerably reduced in the current year.

Although less than half the figure from the previous period, the return that this business is achieving on its assets is still quite good when compared with other businesses in the industry.

2.2 Effectiveness of management policies

2.2.1 Turnover of inventories

The management of inventories has been effective in this accounting period, leading to a decrease in the number of turnover days. This means that inventory is being sold at a faster rate than in the previous year, and at a rate in line with the industry average. This result should indicate a greater volume of sales, which did in fact occur but did not translate into greater profits because the cost of goods sold and other operating expenses rose and therefore negated these improvements.

4

2.2.2 Turnover of accounts receivable

Although turnover days are heading in the right direction (downwards), they are very poor in comparison with industry averages, indicating that this is one area of management that needs a considerable overhaul. Effective strategies to bring debtors into line with the payment terms of their accounts are required immediately.

While bad debts are minimal, they have doubled in comparison with the previous year. This confirms that the management of accounts receivable needs to be brought into the hands of an expert in the field who can rein in some of the problems persisting in this area.

Either accounts receivable are being allowed to avoid paying their debts on time or there is little incentive for them to do so, and, when they do not pay, they are not being chased effectively. The firm's credit policy needs a drastic overhaul. Terms of credit must be clearly set and followed through, and more effectively communicated to credit customers.

Two other practices that might encourage better payment patterns by accounts receivable are the offering of a cash discount for early payment of accounts, such as 2–5% discount. This is a positive measure. A measure of a more negative nature would be to charge interest on the overdue amount.

The number of days of credit is clearly not being enforced if it has in fact been set at all. This must be set at 30 days. There is a clear need in this business for the credit policy to be rewritten. Because bad debts are on the increase, the business needs to be more stringent in granting credit. Set criteria for determining the creditworthiness of accounts receivable must be more clearly stated in the firm's credit policy.

It may be worth considering the employment of a credit specialist who can chase the current overdue accounts and put a more effective credit policy into operation. This lack of effective controls over accounts receivable has created a poor cash flow, because accounts payable cannot be paid until cash is received from the accounts receivable of this firm. The bank balance is depressed and needs a boost with a regular cash flow.

A better cash flow will lead to improvements in the financial stability ratios, particularly the current and the quick ratios.

2.3 Financial stability

2.3.1 Current ratio

Although not indicating difficulty, the current ratio has decreased in the previous 12 months due to an increase in current liabilities and a decrease in current assets. Both of these need to be improved to see this ratio at a better level. An improved cash flow from the implementation of a more effective credit policy will certainly make a good impact on this ratio.

As a general rule of thumb, this ratio should be around 2:1. Because the industry would tend to operate on a higher level of current assets to current liabilities than is presently the case with this business, it would be a desirable goal for the entity to work towards improving this ratio. Of concern are the considerable accounts payable (who make up the biggest proportion of the firm's non-current liabilities at 94%), who could demand payment and leave the business short of available funds to meet these demands. An improved cash flow through better credit management is one answer to this problem.

5

6

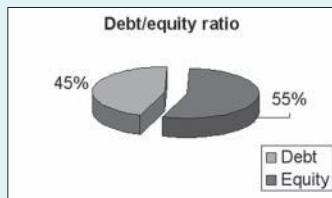
2.3.2 Quick ratio

The quick ratio gives some relative comfort because it shows that the business's current ratio is not being unduly influenced by inventories and prepayments. Because these are difficult to convert to cash very quickly, the business could have placed its short-term liquidity at risk. This is not the case and a ratio of 1.08:1 is to be maintained.

2.3.3 Debt and equity ratios

The debt and equity ratios for this business indicate that there is some balance between how the assets of this business are funded. The ratio is slightly skewed towards debt, but this is not of concern. A balance of 45:55 debt to equity is more balanced than most in the industry (63:37), indicating effective long-term financial stability. The relationship between the debt and equity financing of this enterprise is illustrated in Figure 3, which follows.

Figure 3
Relationship of
debt to equity in
the enterprise



This ratio should be maintained. It shows that the business is geared through lending but not to a dangerous level. These borrowings are not putting the business at risk, and should be maintained as an effective use of external borrowing against internal borrowings.

7

8

3 Conclusion

This enterprise is able to meet its immediate and short-term liabilities. Funding of the business is balanced between internal and external sources. Its gross profit margin is at a satisfactory level; however, the net profit margin has decreased and is low.

Gross profit has decreased despite a moderate increase in sales and this is due to a 31% increase in the cost of goods sold. The subsequent increase in general and administrative expenses has also meant that the net profit has been depressed.

Although the rates of return on owner's equity and assets are also decreasing, they are favourable when compared with industry averages. These two ratios have decreased significantly due to the decrease in net profit over the past year.

Inventory turnover has improved, but this has not resulted in an increase in net profit which is attributable to an almost 30% increase in net operating expenses.

The entity's credit management is poor and is contributing to a decrease in cash flow evidenced by a decreasing bank balance despite an increase in cash sales of 37.5%.

4 Recommendations

- 1 The current ratio is to be monitored carefully to ensure it does not fall below its current level.
- 2 Current liabilities need to be gradually reduced to improve the quick ratio.
- 3 Alternatively, a greater cash flow must be generated, possibly through better credit management.
- 4 Sourcing of funds for the business should be monitored to ensure the business takes full advantage of economic conditions. E Coaldrake should ensure capital invested in the business is earning more than it would if invested in other less risky alternatives.
- 5 The net profit ratio is a cause for concern. Expenses should be monitored carefully and strategies implemented to reduce selling and administrative expenses.
- 6 Investigations should be carried out into:
 - a why depreciation on building has increased 614% but no additional purchase of the asset has occurred
 - b why the cost of goods sold has increased 31%, which has negated the increase in sales of 12.5% and has resulted in a decrease in gross profit.
- 7 Immediate attention should be given to debt collection – the current rate of collection is extremely unfavourable and cannot continue.
- 8 Current management of inventories is effective and should be maintained.

10

5 Bibliography

Greig, P, Mackay, J, Beaumont, S & Sagner, R 2008, *Accounting concepts and applications*, 4th edn, Macmillan Education Australia, Melbourne.







6 Appendices

- | | |
|-----|--|
| i | Financial statements for the year ended 30 June 2010 |
| ii | Vertical and horizontal analysis of the financial statements |
| iii | Ratio analysis of the financial statements |

Understandings

- Accounting is based on assumptions and qualitative characteristics. When reading and using an accounting report, it is important to be aware of these.
- The reported profit in an income statement is an estimate of the true profit because of the many items (e.g. inventories, depreciation, doubtful debts) in this report that are subject to estimate and/or opinion.
- The balance sheet does not reveal the real net worth of a business. This is because assets are usually recorded at their historical cost, rather than at market or benefit value, and are also subject to estimate and/or opinion when calculating items such as inventories, provision for doubtful debts and accumulated depreciation.
- Comparisons of report items over a period of time are complicated because of price changes and the changing value of money. Additivity is another problem to consider when adding together dollars that have changed value.
- Vertical analysis, horizontal analysis, trend analysis and ratio analysis are commonly used in analysing reports.
- Measures of profitability or earning capacity include:
 - gross profit ratio
 - net profit ratio
 - return on owner's equity
 - return on total assets
 - ratios of expenses to sales.
- Measures of liquidity and financial stability include:
 - short-term liquidity: current ratio; quick ratio or acid test ratio
 - long-term liquidity: equity ratio; debt or gearing ratio.
- These ratios should be adequate for a business to always meet both its short-term and long-term financial commitments.
- Measures of effectiveness of certain managerial policies include:
 - turnover of inventories
 - turnover of accounts receivable.
- Inventory turnover is a factor of both sales and inventory levels and may vary significantly from industry to industry.
- Accounts receivable should be turned over in accordance with the credit policy of the firm.
- The interpretation of the cash flow statement allows the effect of operating, financing and investing decisions on the cash flows, and ultimately the cash position to be seen.
- Measures of cash flow include:
 - cash flow adequacy ratio
 - long-term debt repayment ratio
 - cash flow to revenue ratio.
- The decision-making process in accounting includes:
 - collecting and organising relevant data
 - analysing and interpreting the data
 - making and justifying decisions
 - evaluating and assessing decisions made.

Exercises

- ★ **12.1 Function of financial reports**
 What is the purpose of preparing comparative financial reports at the end of each financial period?
- ★★ **12.2 Function and purpose of financial reports**
 Write a magazine article for owners of a small business explaining to them the usefulness of their end-of-period reports. Give your article the title 'Don't file them ... use them!'
- ★ **12.3 Classification used in financial reports**
 Prepare a presentation that revises the classification of the income statement and balance sheet.
- ★★★ **12.4 Limitations of the income statement**
 There are many recognised limitations to the information presented in the income statement. One limitation is inflation. Explain how inflation may limit the validity of information presented in this report.
- ★★★ **12.5 Limitations of the balance sheet**
 There are many recognised limitations to the information presented in the balance sheet. When considering these limitations, some seem to be more significant than others. Review the stated limitations of this report and, in your opinion, explain which is the most important limitation. Give reasons for your choice.
- ★★ **12.6 Limitations of financial reports**
 Prepare a presentation that others can use to learn about one of the following:
a the limitations of financial reports and why users should use reports with caution
b the limitations of the income statement
c the limitations of the balance sheet.
- ★★ **12.7 Calculating profitability ratios**
 Using the following extracts from the income statement and the balance sheet for J Suen Enterprises, calculate the following ratios:
a gross profit ratio
b net profit ratio
c expense categories to sales ratios
d return on equity ratio
e return on total assets ratio.

J Suen Enterprises
Income statement for the year ended 30 June (extract)

	2010	2009
	\$	\$
Sales	25 000	32 000
Sales returns	3 000	3 500
Gross profit	10 000	13 500
General and administrative expenses	2 600	3 400
Selling and distribution expenses	1 250	2 560
Interest expense	330	250
Other finance expenses	250	600
Total finance expense	580	850

J Suen Enterprises
Balance sheet as at 30 June (extract)

	2010	2009
	\$	\$
Total current assets	35 000	48 000
Total non-current assets	125 000	125 000
Owner's equity (beg.)		
Capital	150 000	168 310
Less Drawings	19 000	25 000
Add Net profit	5 570	6 690
Owner's equity (end)	<u>136 570</u>	<u>150 000</u>

★ **12.8 Calculating profitability ratios**

From the following information extracted from the records of L Costello, calculate the earning capacity ratios for 2009 and 2010.

	2010	2009	2008
	\$	\$	\$
Gross profit	100 000	98 400	96 300
Net sales	500 620	400 890	360 890
Drawings	6 500	3 500	9 340
Capital (end of period)	40 260	34 460	22 560
Capital (beg. of period)	34 460	22 560	15 200
Net profit	12 300	15 400	16 700
Interest expense	0	70	60
Total assets (end of period)	56 000	95 300	78 000
Total assets (beg. of period)	95 300	78 000	97 300

★ **12.9 Calculating profitability ratios**

From the following information extracted from the records of P Kenneth, calculate the earning capacity ratios for 2010 and 2009 and comment on the results.

	2010	2009	2008
	\$	\$	\$
Gross profit	200 500	150 300	189 400
Sales	568 400	489 500	36 789
Selling and distribution expenses	15 500	4 650	3 680
General and administrative expenses	4 520	2 680	5 640
Capital (30 June)	300 000	200 000	160 000
Net profit	26 890	9 520	6 700
Interest expense	100	1 560	3 020
Sales returns	15 060	8 900	5 647
Current assets (30 June)	30 600	25 400	9 430
Non-current assets (30 June)	97 800	56 740	27 500

★ **12.10 Calculating profitability ratios**

From the following information extracted from the records of Xavier Pennissi, calculate the earning capacity ratios for 2010 and 2009 and comment on the results.

	2010	2009	2008
	\$	\$	\$
Selling and distribution expenses	15 000	25 300	23 000
Gross profit	175 400	163 000	254 000
Sales	997 000	998 500	780 420
Ordinary expenses	89 500	79 820	95 400
Current liabilities (30 June)	150 680	256 080	140 200
Capital (30 June)	250 000	225 000	225 000
Net profit	50 680	52 000	68 500
Interest expense	1 520	0	300
Sales returns	3 060	6 500	7 440
Current assets (30 June)	97 500	89 670	88 990
Non-current assets (30 June)	97 800	56 740	27 500

★ **12.11 Effectiveness of management policy ratios**

The following is some financial information relating to Pollick Industries:

Financial year ended	2010 \$	2009 \$	2008 \$
Inventories control (30 June)	15 000	16 000	13 000
Inventories control (1 July)	16 000	13 000	14 500
Cost of goods sold	35 000	40 500	42 500
Accounts receivable control (30 June)	150 600	168 020	168 900
Accounts receivable control (1 July)	168 020	168 900	200 500
Net credit sales	400 500	500 600	98 700

Calculate the rate of turnover of inventories and the rate of turnover of accounts receivable for 2010 and 2009 and comment on the results. The credit policy of the company emphasises that all payments of accounts should be received within 30 days.

★ **12.12 Effectiveness of management policy ratios**

The following is financial information relating to IPEC Ltd:

	2010 \$	2009 \$	2008 \$
Inventories control (30 June)	65 420	63 200	98 700
Cost of goods sold	20 300	50 600	56 200
Sales returns (credit)	1 020	2 030	1 560
Accounts receivable control (30 June)	50 600	68 020	68 900
Credit sales	200 580	356 600	456 200

Calculate the rate of turnover of inventories and the rate of turnover of accounts receivable for 2010 and 2009 and comment on the results. The credit policy of the company emphasises that all payments of accounts should be received within 20 days of the account.

★ **12.13 Effectiveness of management policy ratios**

With an emphasis on total quality management, G Ping Enterprises has invited you to assess its management strategies through ratio analysis. You are required to calculate the necessary ratios and comment.

	\$
Cost of good sold	1 300 800
Inventories control (1/7/2009)	132 000
Inventories control (30/6/2010)	98 000
Net cash sales	397 260
Net credit sales	3 100 000
Accounts receivable control (1/7/2009)	260 700
Accounts receivable control (30/6/2010)	120 700
Accounts payable control (1/7/2009)	56 900
Accounts payable control (30/6/2010)	49 000

★ **12.14 Financial stability ratios**

From the following information extracted from Simpson's records, calculate the financial stability ratios for 2010 and 2009 and comment on the results.

	2010 \$	2009 \$
Current liabilities	28 200	26 150
Inventories control (30 June)	5 500	6 700
Prepayments	50	60
Current assets	21 000	29 050
Bank overdraft	9 800	7 950
Capital	52 900	49 300
Non-current liabilities	12 600	11 900
Non-current assets	72 700	58 300

★ 12.15 Financial stability ratios

The following is an extract from the books of M James. Calculate the financial stability ratios for both years and comment on the results indicated.

	2010 \$	2009 \$
Current assets	52 800	29 600
Inventories control (30 June)	9 800	12 600
Furniture and fittings	6 300	2 300
Prepayments	100	0
Current liabilities	2 300	6 500
Short-term loans	200	300
Bank overdraft	0	3 450
Non-current liabilities	83 000	3 900
Non-current assets	98 600	45 400
Capital	66 100	64 600

★ 12.16 Financial stability ratios

The following is an extract from the books of Ruben Industries. Calculate the financial stability ratios for the years 2010 and 2009 and comment on the results.

	2010 \$	2009 \$
Non-current liabilities	33 900	20 800
Capital	80 730	225 400
Investments	100 500	200 900
Current liabilities	97 400	105 000
Inventories control (30 June)	26 500	19 400
Motor vehicles	97 800	23 460
Accrued expenses	0	2 300
Current assets	146 250	235 600
Prepayments	200	300
Bank overdraft	0	3 450
Non-current assets	65 780	115 600
Long-term loans	20 000	35 000

★ 12.17 Cash flow ratios

Calculate the following ratios for A Kelly:

- a cash flow to revenue ratio
- b cash flow adequacy ratio

Use this information:

- asset purchased – \$2 000
- long-term debt paid – \$18 000
- cash flows from financing activities – \$12 000
- net revenue – \$1 010 000

- c long-term debt payment ratio.

- cash flows from operating activities – \$789 000
- total debt – \$28 000
- drawings – inventories – \$2 000
– cash – \$8 000.

★ 12.18 Cash flow ratios

Calculate the following ratios for L Domini:

- a cash flow to revenue ratio
- b cash flow adequacy ratio

Use this information:

- net revenue – \$1 600 000
- total debt – \$290 000
- asset purchased – \$60 000
- cash flows from operating activities – \$765 000

- c long-term debt payment ratio

- long-term debt payments – \$7 500
- cash flows from financing activities – \$27 500
- total assets – \$1 200 000
- drawings – cash – \$9 000.

★★ 12.19 Ratio analysis

Using ratio analysis, prepare profitability, activity and financial stability ratios for the following enterprise for the years 2010 and 2009.

K O'Grady
Comparative income statement for the year ended 30 June

	2010	2009
	\$	\$
Sales		
Cash	3 100 000	3 230 000
Credit	789 000	650 000
	<u>3 889 000</u>	<u>3 880 000</u>
<i>Less Cost of goods sold</i>	<u>3 136 500</u>	<u>3 209 000</u>
GROSS PROFIT	752 500	671 000
Less Expenses from ordinary activities		
<i>SELLING AND DISTRIBUTION</i>		
Advertising	15 000	10 000
Delivery van expenses	2 500	3 000
Rent on showroom	34 000	20 000
Total selling and distribution	<u>51 500</u>	<u>33 000</u>
<i>GENERAL AND ADMINISTRATIVE</i>		
Telephone	14 000	12 000
Depreciation of furniture and fixtures	1 500	2 000
Wages	68 000	66 000
Salaries	120 000	100 000
Insurance	3 500	3 000
Total general and administrative	<u>207 000</u>	<u>183 000</u>
<i>FINANCE</i>		
Interest on loan	14 000	12 000
Bad debts	4 700	5 000
Total finance	<u>18 700</u>	<u>17 000</u>
Total expenses from ordinary activities	<u>277 200</u>	<u>233 000</u>
NET PROFIT	<u><u>\$475 300</u></u>	<u><u>\$438 000</u></u>

K O'Grady
Comparative balance sheet as at 30 June

	2010	2009
	\$	\$
Assets		
<i>Current assets</i>		
Bank	1 500 000	1 600 000
Accounts receivable control	187 000	166 000
Inventories control	990 000	800 000
Prepaid expenses	10 000	10 000
Total current assets	<u>2 687 000</u>	<u>2 576 000</u>
<i>Non-current assets</i>		
Property, plant and equipment (net of accumulated depreciation)	9 990 100	10 000 000
Investments	581 000	130 000
Total non-current assets	<u>10 571 100</u>	<u>10 130 000</u>
TOTAL ASSETS	<u><u>\$13 258 100</u></u>	<u><u>\$12 706 000</u></u>
Liabilities and equity		
<i>Current liabilities</i>		
Accounts payable control	877 500	556 000
GST clearing	2 000	2 000
Accrued expenses	10 000	15 000
Total current liabilities	<u>889 500</u>	<u>573 000</u>
<i>Non-current liabilities</i>		
Loan	1 000 000	1 000 000
Mortgage (maturity date 1/02/2014)	3 790 300	4 000 000
Total non-current liabilities	<u>4 790 300</u>	<u>5 000 000</u>
Total liabilities	<u>5 679 800</u>	<u>5 573 000</u>
Equity		
Capital	7 133 000	6 715 000
Add Net profit	475 300	438 000
	<u>7 608 300</u>	<u>7 153 000</u>
<i>Less Drawings</i>	<u>30 000</u>	<u>20 000</u>
Total equity	<u>7 578 300</u>	<u>7 133 000</u>
TOTAL LIABILITIES AND EQUITY	<u><u>\$13 258 100</u></u>	<u><u>\$12 706 000</u></u>

Additional information:

Inventories control at 1 July 2009 is \$100 000.

★★ 12.20 Ratio analysis

From the following information extracted from the financial records of Fleming Trading:

- a** calculate the relevant ratios **b** analyse the results
c write a report to the board of directors commenting on important facts and detailing your recommendations. Some graphical presentation/s may be included in this report.

Fleming Trading
Income statement for the year ended 30 June 2010

	\$	\$	\$
Sales			
Credit		90 000	
Cash		170 000	260 000
Less Cost of goods sold			48 000
GROSS PROFIT			212 000
Add Other revenue from ordinary activities			
Rent revenue			9 600
			221 600
Less Other expenses from ordinary activities			
<i>SELLING AND DISTRIBUTION EXPENSES</i>			
Advertising	7 000		
Salaries – sales	43 000	50 000	
<i>GENERAL AND ADMINISTRATIVE EXPENSES</i>			
Accounting fees	3 000		
Depreciation on property, plant and equipment	1 000		
Printing	6 000		
Electricity	4 500		
Salaries – office staff	63 200		
Stationery	3 620		
Telephone	5 180	86 500	
<i>FINANCE EXPENSES</i>			
Doubtful debts	4 000		
Interest expense	10 000	14 000	150 500
NET PROFIT			\$71 100

Fleming Trading
Balance sheet as at 30 June

	2010	2009
	\$000	\$000
ASSETS		
<i>Current assets</i>		
Bank	98 000	0
Accounts receivable control	25 600	32 000
Investments	200 000	180 000
Inventories control	12 000	15 000
Prepaid expenses	2 000	1 450
Total current assets	337 600	228 450
<i>Non-current assets</i>		
Property, plant and equipment	199 000	286 000
Intangibles	11 500	9 450
Other	4 000	2 500
Total non-current assets	214 500	297 950
Total assets	552 100	526 400
LIABILITIES		
<i>Current liabilities</i>		
Bank overdraft	0	15 600
Accounts payable control	39 000	62 400
Provisions	18 000	7 500
GST clearing	4 000	4 000
Total current liabilities	61 000	89 500
<i>Non-current liabilities</i>		
Creditors and borrowings	185 000	167 800
Provisions	25 000	30 100
Others	10 000	1 000
Total non-current liabilities	220 000	198 900
Total liabilities	281 000	288 400
NET ASSETS	\$271 100	\$238 000
Owner's equity		
Capital	238 000	194 500
Less Drawings	38 000	0
Add Net profit	71 100	43 500
TOTAL EQUITY	\$271 100	\$238 000

★★ 12.21 Cash flow ratios

Using ratio analysis, prepare the cash flow to revenue, cash flow adequacy and long-term debt payment ratios for A Kearney for 2010 and 2009.

A Kearney
Cash flow statement for the year ended 30 June

	2010	2009
	Inflows (Outflows)	Inflows (Outflows)
<i>Cash flows from operating activities</i>	\$	\$
Receipts from customers	7 884	9 887
Payments to suppliers and employees	(3 365)	(6 553)
Interest paid	(225)	(114)
GST remitted to ATO	(81)	(187)
Payment of operating expenses	(1 400)	(2 445)
Net cash provided by operating activities	2 813	588
<i>Cash flows from investing activities</i>		
Payment for property and plant	(25 000)	(15 000)
Sale of investment	10 000	
Proceeds from sale of property and plant	0	10 000
Net cash used in investing activities	(15 000)	(5 000)
<i>Cash flows from financing activities</i>		
Drawings	(6 651)	(5 000)
Proceeds from borrowings	12 000	20 000
Repayment of borrowings	(3 000)	0
Net cash provided by financing activities	2 349	15 000
Net increase (decrease) in cash held	(9 838)	10 588
Cash at beginning of year	26 208	15 620
Cash at end of year	\$16 370	\$26 208

Additional information:

The net revenue for 2010 and 2009 was \$3 627 and \$820, respectively.

★★ 12.22 Cash flow ratios

Using ratio analysis, prepare the cash flow to sales, cash flow adequacy and long-term debt payment ratios for Bernie Cunningham's Ironing Services for 2010 and 2009.

Bernie Cunningham's Ironing Services
Cash flow statement for the year ended 30 June

	2010	2009
	Inflows (Outflows)	Inflows (Outflows)
<i>Cash flows from operating activities</i>	\$	\$
Receipts from customers	114 800	191 105
Payments to suppliers and employees	(68 774)	(112 000)
Interest paid	(445)	(668)
GST remitted to ATO	(1 447)	(1 887)
Payment of operating expenses	(28 779)	(22 543)
Net cash provided by operating activities	15 355	54 007
<i>Cash flows from investing activities</i>		
Payment for property and plant	(78 000)	(65 000)
Sale of investment	21 100	
Proceeds from sale of property and plant	0	54 712
Net cash used in investing activities	(56 900)	(10 288)
<i>Cash flows from financing activities</i>		
Drawings	(15 888)	(5 000)
Proceeds from borrowings	50 000	0
Repayment of borrowings	(3 000)	(62 000)
Net cash provided by financing activities	31 112	(67 000)
Net increase (decrease) in cash held	(10 433)	(23 281)
Cash at beginning of year	44 603	67 884
Cash at end of year	\$34 170	\$44 603

Additional information:

Net revenue \$20 600 (in 2010) and \$63 000 (in 2009).

★★ 12.23 Vertical analysis

Prepare a vertical analysis on the financial reports of G O'Dempsey's catering business, trading as Gerard's Angels – Feeding the Multitudes, for 2010 and 2009.

Gerard's Angels – Feeding the Multitudes Income statement for the year ended 30 June

	2010	2009
	\$	\$
Sales of goods and services – credit	1 250 000	1 428 080
– cash	200 000	300 000
	<u>1 450 000</u>	<u>1 728 080</u>
Less Cost of goods and services sold	115 500	214 452
GROSS PROFIT	<u>1 334 500</u>	<u>1 513 628</u>
Add Other revenue from ordinary activities		
Rent revenue	1 000	1 000
	<u>1 335 500</u>	<u>1 514 628</u>
Less Other expenses from ordinary activities		
Selling and distribution expenses	313 500	445 742
General and administrative expenses	459 400	988 521
Finance expenses	62 200	25 445
NET PROFIT	<u>\$500 400</u>	<u>\$54 920</u>

Gerard's Angels – Feeding the Multitudes Balance sheet as at 30 June

	2010	2009
	\$	\$
Assets		
<i>Current assets</i>		
Bank	543 300	0
Deposits at call	100 000	0
Accounts receivable control	190 000	450 000
Inventories control (30 June)	71 600	62 100
Prepaid expenses	9 000	21 600
<i>Non-current assets</i>		
Motor vehicle	80 000	65 000
Accumulated depreciation – motor vehicle	(6 000)	(6 500)
Furniture	27 000	27 000
Accumulated depreciation – furniture	(5 500)	(3 500)
Shares – Bahama Ltd	146 000	146 000
Total assets	<u>1 155 400</u>	<u>761 700</u>
Less Liabilities		
<i>Current liabilities</i>		
Bank overdraft	0	100 000
Accounts payable control	50 000	93 200
Unearned revenue	600	500
GST clearing	2 000	1 100
<i>Non-current liabilities</i>		
Long-term market bill	50 000	0
Mortgage	80 000	100 000
Loan (maturing July 2013)	230 000	230 000
Total liabilities	<u>412 600</u>	<u>524 800</u>
NET ASSETS	<u>\$742 800</u>	<u>\$236 900</u>
Owner's equity		
Capital, G O'Dempsey	247 900	188 540
Net profit (loss)	500 400	54 920
Drawings	(5 500)	(6 560)
TOTAL EQUITY	<u>\$742 800</u>	<u>\$236 900</u>

★★ 12.24 Vertical analysis

Prepare a vertical analysis on the financial reports of B Watson, a gym equipment supplier, for 2010 and 2009.

B Watson		
Income statement for the year ended 30 June		
	2010 \$	2009 \$
Sales	180 000	200 000
Less Sales returns	(5 000)	(4 800)
	175 000	195 200
Less Cost of goods sold	81 600	91 744
GROSS PROFIT	93 400	103 456
Add Other revenue from ordinary activities		
Interest revenue	4 230	3 900
Rent revenue	5 050	6 250
Commission revenue	19 000	6 550
	121 680	120 156
Less Other expenses from ordinary activities		
<i>SELLING AND DISTRIBUTION EXPENSES</i>		
Advertising	12 600	21 800
Cartage outwards	3 500	2 860
Sales commission	5 000	7 000
Depreciation – sales vehicle	5 625	4 775
Salary – sales representative	12 000	10 000
Vehicle expenses	600	1 500
<i>GENERAL AND ADMINISTRATIVE EXPENSES</i>		
Electricity expense	1 200	1 200
Insurance expense	1 200	1 800
Loss from theft	20 000	0
Bank fees	600	540
Stationery	230	522
Telephone expense	600	700
Wages – office	18 000	15 000
Depreciation – buildings	20 000	18 000
Depreciation – furniture	3 750	2 555
<i>FINANCE EXPENSES</i>		
Bad debts	700	1 110
Doubtful debts	1 600	200
Total expenses from ordinary activities	107 205	89 562
NET PROFIT	\$14 475	\$30 594

B Watson
Balance sheet as at 30 June

	2010 \$	2009 \$
Assets		
<i>Current assets</i>		
Bank	8 000	0
Accounts receivable control	22 000	35 000
Less Provision for doubtful debts	(1 600)	(2 650)
Inventories control	51 000	65 220
Prepaid expenses	970	600
<i>Non-current assets</i>		
Furniture	25 000	25 000
Accumulated depreciation – furniture	(15 000)	(10 000)
Sales vehicle	40 000	40 000
Accumulated depreciation – sales vehicle	(23 125)	(17 885)
Buildings	100 000	50 000
Accumulated depreciation – buildings	(40 000)	(45 000)
Patents	70 000	70 000
Less Accumulated amortisation	(40 000)	(30 000)
Total assets	<u>197 245</u>	<u>180 285</u>
Less Liabilities		
<i>Current liabilities</i>		
Bank overdraft	0	45 639
Accounts payable control	15 000	21 000
Unearned revenue	450	546
GST clearing	1 220	2 000
<i>Non-current liabilities</i>		
Mortgage	80 000	5 000
Total liabilities	<u>96 670</u>	<u>74 185</u>
NET ASSETS	<u>\$100 575</u>	<u>\$106 100</u>
Owner's equity		
Capital	106 100	104 736
Net profit (loss)	14 475	30 594
Drawings	(20 000)	(29 230)
TOTAL EQUITY	<u>\$100 575</u>	<u>\$106 100</u>

★★ 12.25 Vertical analysis

Prepare a vertical analysis on the financial reports of Jixin Xing, a book supplier, for 2010 and 2009.

Jixin Xing Income statement for the year ended 30 June		
	2010 \$	2009 \$
Sales (net)	50 000	65 000
Less Cost of goods sold	12 500	19 800
GROSS PROFIT	37 500	45 200
Add Other revenue from ordinary activities		
Interest revenue	3 550	2 120
Rent revenue	6 500	5 500
Commission revenue	13 000	4 200
	<u>60 550</u>	<u>57 020</u>
Less Other expenses from ordinary activities		
Selling and distribution expenses	5 688	6 558
General and administrative expenses	11 452	9 855
Finance expenses	2 556	2 155
NET PROFIT	<u>\$40 854</u>	<u>\$38 452</u>

Jixin Xing Balance sheet as at 30 June		
	2010 \$	2009 \$
Assets		
<i>Current assets</i>		
Bank	0	0
Accounts receivable control	42 550	55 441
Less Provision for doubtful debts	(3 550)	(1 445)
Inventories control	128 000	119 500
Prepaid expenses	3 600	6 500
<i>Non-current assets</i>		
Equipment	60 000	25 000
Accumulated depreciation – equipment	(12 500)	(2 500)
Plant and machinery	178 000	169 400
Accumulated depreciation – plant and machinery	(14 000)	(13 500)
Buildings	90 000	90 000
Accumulated depreciation – buildings	(34 200)	(29 000)
Copyright	100 000	100 000
Less Accumulated amortisation	(25 000)	(20 000)
Total assets	<u>512 900</u>	<u>499 396</u>
Less Liabilities		
<i>Current liabilities</i>		
Bank overdraft	66 544	49 865
Accounts payable control	65 400	54 511
Accrued expenses	3 669	4 893
GST clearing	859	4 553
<i>Non-current liabilities</i>		
Mortgage	200 000	230 000
Total liabilities	<u>336 472</u>	<u>343 822</u>
NET ASSETS	<u>\$176 428</u>	<u>\$155 574</u>
Owner's equity		
Capital	155 574	137 122
Net profit (loss)	40 854	38 452
Drawings	(20 000)	(20 000)
TOTAL EQUITY	<u>\$176 428</u>	<u>\$155 574</u>

★★ 12.26 Horizontal analysis

Using the figures in the financial reports of G O'Dempsey's catering business, trading as Gerard's Angels – Feeding the Multitudes, shown in exercise 12.23 on page 660, prepare a horizontal analysis of the financial reports for 2010 and 2009.

★★ 12.27 Horizontal analysis

Using the figures in the financial reports of B Watson, a gym equipment supplier, shown in exercise 12.24 on pages 661–2, prepare a horizontal analysis of the financial reports for 2010 and 2009.

★★ 12.28 Horizontal analysis

Using the figures in the financial reports of Jixin Xing, a gym equipment supplier, shown in exercise 12.25 on page 663, prepare a horizontal analysis of the financial reports for 2010 and 2009.

★★ 12.29 Trend analysis

Using the following information, prepare a trend analysis in graphical form to indicate trends in:

- a** net profit
- b** operating expenses.

Comment on the apparent trends. (Figures provided are a percentage of net sales.)

	2006	2007	2008	2009	2010
	%	%	%	%	%
Ordinary expenses	12.55	13.25	15.68	26.25	28.44
Net profit	21.55	28.54	23.55	13.58	7.99

★★ 12.30 Trend analysis

Using the following information, prepare a trend analysis in graphical form to indicate trends in:

- a** selling and distribution expenses
- b** general and administrative expenses
- c** finance expenses.

Comment on the apparent trends.

	2006	2007	2008	2009	2010
	% of net sales	% of net sales	% of net sales	% of net sales	% of net sales
Ordinary expenses					
Total selling and distribution	12	7	6	8	13
Total general and administrative	6	9	8	11	12
Total finance	2	3	3	3	2

★★ 12.31 Trend analysis

A finance committee is considering the effects that varying the sales price of goods would have on its yearly profit. To facilitate the analysis and interpretation of this process, you have been asked to:

- a** develop a spreadsheet similar to the style of the one on page 665
- b** enter formulas to ascertain the percentage (%) of sales revenue rows and the other missing figures
- c** enter formulas to ascertain the difference columns as a percentage of the 2010 figures in the spreadsheet
- d** show the percentages in the difference columns for each option graphically
- e** comment on the final results.

Proposed options available for 2011

	2010 Actual	2011 Budget option 1	Difference from 2010 %	2011 Budget option 2	Difference from 2010 %	2011 Budget option 3	Difference from 2010 %
Sales revenue	2 304 328	2 278 656		2 284 640		2 437 632	
Interest revenue	1 466 900	1 496 238		1 496 238		1 496 238	
Commission revenue	3 058 480	3 206 880		3 206 880		3 206 880	
Rent revenue	218 832	234 032		234 032		234 032	
Total income							
Selling and distribution expenses	3 622 746	4 441 520		4 441 520		4 441 520	
% of sales revenue							
General and administrative expenses	1 923 986	2 257 140		2 257 140		2 257 140	
% of sales revenue							
Finance expenses	236 629	442 708		442 708		442 708	
% of sales revenue							
Total expenditure							
Income > expenditure							

★★ 12.32 Trend analysis

Chart the following budgeted figures with the actual figures and comment on the trend.

	2006 % of sales	2007 % of sales	2008 % of sales	2009 % of sales	2010 % of sales
Actual ordinary expenses	25.36	25.98	33.11	44.22	42.54
Budgeted figures	27	24	30	35	38

★★ 12.33 Limitations of ratio analysis



A close friend has recently expressed an interest in purchasing an existing business and seeks your advice in helping him to look at the end-of-period financial reports of the business prepared for the previous financial year. Respond to his email by giving him some advice on the limitations of ratio analysis.

	To:	dogsgowoolwoof@hotmail.com
	Cc:	
	Bcc:	
	Subject:	my latest adventure

Hi Kath

Can you help? I've just picked up a set of financials from that couple I was talking to last week about the purchase of their tyre business on Fahey Road.

I know that we did this stuff in accounting at school and you always understood it better than me, so could you do a few ratios and tell me whether it looks like the financial side of the business is OK. Should I go ahead with the purchase?

Thanks, mate. I owe you one!

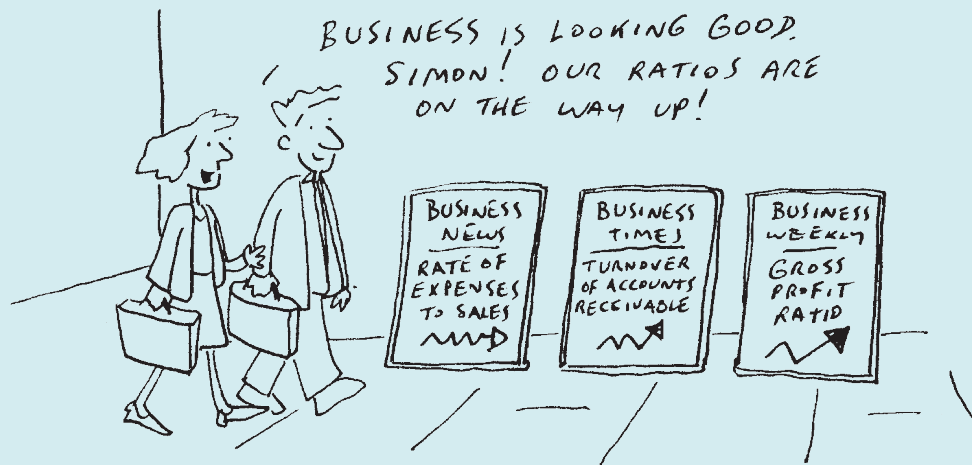
Nathan

12.34 Limitations of ratio analysis



The following cartoon was published in the local business newspaper. One of your clients made the comment: 'It is pleasing to see this enterprise doing so well.' Draft a letter that would be suitable to be sent to your clients.

- Comment on the message in the cartoon
- Address the validity or otherwise of the message given.



★★ 12.35 Applying internal benchmarks

Combine the horizontal and vertical analysis prepared for G O'Dempsey's catering business, trading as Gerard's Angels – Feeding the Multitudes, in exercises 12.23 and 12.26. Apply the internal benchmarks of 10% and \$10 000, and analyse the variances.

★★ 12.36 Applying internal benchmarks

Combine the horizontal and vertical analysis prepared for B Watson in exercises 12.24 and 12.27. Apply the internal benchmarks 22% and \$50 000, and analyse the variances.

★★ 12.37 Applying internal benchmarks

Combine the horizontal and vertical analysis prepared for Jixin Xing in exercises 12.25 and 12.28. Apply the internal benchmarks of 15% and \$15 000, and analyse the variances.

★★ 12.38 Analysis of financial reports

Using the strategy given in the text on page 642 for interpreting the financial reports of an enterprise, make the necessary preparations in order to analyse the results of K O'Grady's financial reports for exercise 12.19. Use significant variances of \$30 000 and 10%.

★★★★ 12.39 Formal report



Based on the preparation for analysis of K O'Grady's financial reports from exercise 12.38, and subsequent analysis and interpretation of these results, communicate your findings in a formal report to the owner. Focus on her financial performance (income statement) and position (balance sheet) over the past financial year.

★★ 12.40 Informal report



Using the cash flow ratio analysis prepared for Bernie Cunningham's Ironing Services in exercise 12.22, analyse and interpret the results and communicate your findings to the owner, Bernie Cunningham.

★★★★ 12.41 Decision-making

Using the financial reports for Sara Davidson shown on pages 667–8, complete the following:

- Prepare the reports in spreadsheet format.
- Prepare the vertical and horizontal analysis.
- Analyse the results of the horizontal analysis by applying the following internal benchmarks to determine which figures should be analysed: 6% variance and more than \$500 000. (Note that figures in the statements are presented in \$000s.)
- Prepare the ratio analysis (excluding cash flow ratios).
- Prepare a summary of ratios with the external benchmarks shown in the following table.
- Prepare an interpretation of the analysis of the reports for Sara Davidson and present this information in an informal report.

		Benchmark industry average
Profitability ratios	Gross profit ratio	38%
	Net profit ratio	11.24%
	Return on equity ratio	8.5%
	Return on total assets ratio	8.00%
Effectiveness of management policies	Turnover of inventories rate	121 days
	Turnover of accounts receivable rate	90 days
Financial stability (liquidity ratios)	Current ratio	1.771
	Quick ratio	1.09:1
	Equity ratio	68.84%
	Debt ratio	31.16%

Sara Davidson
Income statement for the year ended 30 June

	2010 \$000	2009 \$000
Sales		
Cash	540	747
Credit	16 544	15 933
Total net sales	17 084	16 680
Less Cost of goods sold	1 916	1 444
GROSS PROFIT	15 168	15 236
Other revenue from ordinary activities		
Rent	2 262	0
	17 430	15 236
Less Expenses from ordinary activities		
<i>SELLING AND DISTRIBUTION</i>		
Advertising	500	400
Sales staff motor vehicle expense	360	20
Display village rent	5 000	3 200
Total selling and distribution	5 860	3 620
<i>GENERAL AND ADMINISTRATIVE</i>		
Depreciation of plant and equipment	1 000	1 200
Insurance	400	1 290
Rates	1 000	760
Salaries	2 000	2 000
Telephone	70	69
Total general and administrative	4 470	5 319
<i>FINANCE</i>		
Doubtful debts expense	400	310
Interest on loan	50	70
Total finance	450	380
Total expense from ordinary activities	10 780	9 319
NET PROFIT	\$6 650	\$5 917

Sara Davidson
Balance sheet as at 30 June

	2010	2009
	\$000	\$000
Assets		
<i>Current assets</i>		
Bank	613	569
Accounts receivable control	2 500	2 000
Inventories control	2 047	1 979
Prepaid expenses	207	142
Total current assets	<u>5 367</u>	<u>4 690</u>
<i>Non-current assets</i>		
Property, plant and equipment (net of accumulated depreciation)	17 747	16 197
Investments	2 698	2 765
Intangibles	749	466
Total non-current assets	<u>21 194</u>	<u>19 428</u>
TOTAL ASSETS	<u>\$26 561</u>	<u>\$24 118</u>
Liabilities and owner's equity		
<i>Current liabilities</i>		
Accounts payable control	3 852	3 913
Accrued expenses	1 000	1 000
GST clearing	204	260
Total current liabilities	<u>5 056</u>	<u>5 173</u>
<i>Non-current liabilities</i>		
Mortgage (1/12/2014)	5 810	6 305
Loan from Buzz Finance	3 696	3 260
Total non-current liabilities	<u>9 506</u>	<u>9 565</u>
Total liabilities	<u>14 562</u>	<u>14 738</u>
Owner's equity		
Capital	9 380	5 077
Add Net profit	6 650	5 917
	<u>16 030</u>	<u>10 994</u>
Less Drawings	4 031	1 614
Total owner's equity	<u>11 999</u>	<u>9 380</u>
Total liabilities and owner's equity	<u>\$26 561</u>	<u>\$24 118</u>

RD4

Managerial decision-making

Cost-volume-profit analysis (using the contribution margin approach)

- Decision-making and CVP analysis
- Fixed and variable costs
- Contribution margin income statement
- Calculation of contribution margin
- Decision-making using the contribution margin

Break-even analysis

- Break-even analysis
- Decision-making using break-even analysis

Costs of making a product or providing a service

- Costs of manufacture/service provision
- Decision-making – price-setting using manufacturing costs
- Addressing GST

Part 1 – Cost-volume-profit analysis (using the contribution margin approach)

Already know

- Decision-making is an objective of accounting
- Expenses are incurred in order to earn a profit

Need to know

- Managerial decisions to be made by a business
- The distinction between fixed and variable costs
- The contribution margin approach to decision-making using CVP analysis
- Costs involved in making a product or providing a service
- What is cost-volume-profit analysis

Using this knowledge

- *Provide information for decision-making.* Contribution margin analysis can assist businesses in making a range of important managerial decisions
- *Help evaluate performance.* Contribution margin approach can be applied to certain product lines to evaluate profit contribution.

ACCOUNTING VOCABULARY

Contribution margin
Cost-volume-profit

Fixed costs
Variable costs

Learning objectives

After completing this section, you should be able to:

- 1 explain the distinction between fixed costs and variable costs.
- 2 explain and demonstrate how the contribution margin approach is used in managerial decision-making.

Decision-making and CVP analysis

Learning objective 1

In chapter 12, decision-making centred on the end-of-period reports and the information based on the historical data indicating the performance, stability and liquidity of the business. This type of accounting is often referred to as *financial accounting*.

On a day-to-day basis, a business owner needs to make managerial decisions that project into the future. The tools covered in this chapter and the next are used for decision-making in business by managerial accountants.

Managerial accounting seeks to answer the following types of questions:

- Should the selling price increase?
- Should the business make or buy a particular product?
- What would be the effect on profit if prices increased?
- What would be the effect on profit if costs were contained?
- If a certain profit is desired, how many units must be produced?
- Should advertising dollars be increased?
- Should a product line be removed or retained?
- How many units must be sold to break even?

In order to help answer these questions, managerial accountants examine the sales and expenses of the business. This managerial accounting tool is also called *cost-volume-profit analysis (CVP analysis)*. This is a tool used by managerial accountants to understand the relationships between costs, volume (of sales) and profit. This type of analysis relies on some basic assumptions that we will accept for use in this chapter:

- 1 Costs can be distinguished as either fixed or variable.
- 2 Fixed costs remain constant over the relevant range; that is, if production/sales is 0–1 000 (the relevant range), then fixed costs will be the same whether 0 items are produced/sold or 10 000 items are produced/sold.
- 3 A single product is produced/sold.

CVP analysis has its limitations but is still widely used by managerial accountants. The calculations, although not totally precise, give a good general guide for decision-making purposes.

A business incurs expenses when generating a profit. Expenses used in managerial decision-making are often referred to as *costs* and can be categorised as fixed or variable costs. The categorisation of these costs depends on whether the cost will vary when the quantity of the sales increases or decreases.

Fixed and variable costs

Fixed costs are those costs that do not vary when the level of output (sales) changes. These are costs such as rent, insurance, wages of full-time, permanent employees, depreciation and interest on long-term debt. A pizza shop owner, for example, may have fixed costs such as repayments on a delivery van and rent of premises.

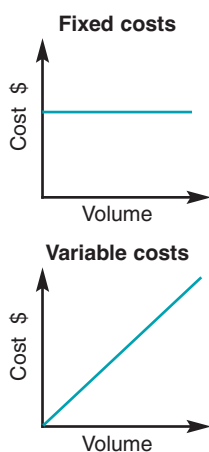


Fixed costs remain the same as the level of activity changes.

Variable costs are those costs that increase in proportion to the output being produced by the business. These are costs such as inventory purchases, packaging, hourly wages and incentive payments. The variable costs of a pizza shop owner would include flour, toppings and pizza boxes.



Variable costs change as the level of activity changes.



Fixed costs remain constant even if the business has zero output (no sales). It is also true that, above a certain level of production, fixed costs would have to increase to a new level. For example, if the business moved to bigger premises to accommodate an increase in production, the rent (a fixed cost) would increase, thereby increasing total fixed costs.

In contrast, variable costs only occur when production commences. They are added to fixed costs to determine total cost:

$$\text{Total cost} = \text{Fixed costs} + \text{Variable costs}$$

Some costs do not fall neatly into either category and may have an element of both fixed and variable. For example, a cost such as wages may have an element of fixed (permanent employees) and variable (casual employees). These costs are called mixed costs. For the purposes of CVP analysis, the fixed or variable components of costs need to be determined. This is generally done by allocating a percentage of the cost as either fixed or variable.

Contribution margin income statement



The **contribution margin** is sales less variable costs.

'Contribution margin' is a managerial accounting term that describes the amount of gross profit received from sales after variable costs are deducted. A managerial accountant, without the constraints of accounting standards, can prepare internal

reports to provide the information desired by the owner/manager. Such reports assist in making decisions. The contribution margin income statement can be prepared based on information in the income statement.

EXAMPLE 1

Peter Sample, the owner/manager of Perfect Pizza, has received his income statement from his accountant, but now wants to make some managerial decisions. His income statement is as follows:

Perfect Pizza Income statement for the year ended 30 June 2010		
	\$	\$
Sales	48 000	
Less Cost of goods sold	<u>16 000</u>	
Gross profit		32 000
Less Other expenses from ordinary activities		
Electricity	820	
Cartage on sales	120	
Wages – casual employees	6 450	
Salary – P Sample (manager)	15 000	
Rent	3 380	
Bookkeeping expenses	400	
Delivery van expenses	1 230	
Interest on loan	60	
Insurance	<u>340</u>	<u>27 800</u>
Net profit		<u>\$4 200</u>

Peter considers what the variable costs are for Perfect Pizza. He determines that those costs that will change according to the number of pizzas sold are:

- cost of goods sold
- cartage on sales
- delivery van expenses
- wages.

These costs total \$23 800.

Peter prepares a contribution margin income statement using the same information but grouping fixed and variable expenses together.

A contribution margin income statement will be set out as sales less variable costs equals contribution margin. The fixed costs are then subtracted from the contribution margin to calculate net profit.

Perfect Pizza Contribution margin income statement for the year ended 30 June 2010		
	\$	\$
Sales		48 000
Less Variable costs		
Cost of goods sold	16 000	
Cartage on sales	120	
Delivery van expenses	1 230	
Wages – casual employees	<u>6 450</u>	
<i>Total variable costs</i>		<u>23 800</u>
Contribution margin		24 200
Less Fixed costs		
Salary – P Sample (manager)	15 000	
Rent	3 380	
Bookkeeping expenses	400	
Interest on loan	60	
Electricity	820	
Insurance	<u>340</u>	
<i>Total fixed costs</i>		<u>20 000</u>
Net profit		<u>\$4 200</u>

Calculation of contribution margin

Break-even analysis using the contribution margin approach is covered in detail on pages 678–80.

The contribution margin represents that amount of sales revenue left over after variable costs have been deducted. The contribution margin dollars then contribute to the fixed costs of the business. At some point, all fixed costs will be met and this point is called the *break-even point* (that is, all variable and fixed costs are met). From this point, the remainder of the contribution margin is net profit.

Contribution margin can be expressed as one of the following:

- a percentage
- a dollar value
- per unit
- a ratio.

Contribution margin in dollars (as calculated in the contribution margin income statement):

$$\begin{aligned}
 \text{Total contribution margin} &= \text{Total sales revenue} - \text{Total variable costs} \\
 &= 48\,000 - 23\,800 \\
 &= \$24\,200
 \end{aligned}$$

Therefore, the contribution margin in dollars is \$24 200.

Contribution margin ratio/percentage

The contribution margin ratio (or percentage) is expressed as a proportion of the sales figure.

$$\begin{aligned}
 \text{Contribution margin ratio} &= \frac{\text{Total contribution margin}}{\text{Total sales revenue}} \\
 &= 24\,200 \div 48\,000 \\
 &= 0.5041666 : 1 \text{ or } 50.41666\%
 \end{aligned}$$

The ratio indicates to the managerial accountant that for every \$1 of sales, approximately 50 cents contributes to covering the fixed costs and profit. The contribution margin percentage indicates that just over 50% of the sales dollar contributes to fixed costs and profit.

Contribution margin per unit

To calculate a per unit contribution margin, the selling price per unit is required. If the selling price is \$12.00 per unit, then the contribution margin per unit is 50.41666% of the selling price, which is \$6.05.

Review & practice

1

- a Using the chart of accounts at the front of this book, list five expenses that would be classified as variable costs, and five that would be classified as fixed costs.
- b Icecastles makes ice sculptures for weddings and restaurants. The business freezes water with an ingredient imported from China that prevents the ice from shattering, and then a specialist sculptor carves out objects from the ice. Identify the following costs as fixed or variable for this business:
 - i water
 - ii special ingredient
 - iii manager's salary
 - iv import licence to import the special ingredient
 - v sculptor's wage
 - vi depreciation on the freezer.



- c Complete a contribution margin income statement based on the following information:

Pedigree Pet Grooming
Income statement for the year ended 30 June 2010

	\$	\$
Sales	17 500	
Less Cost of goods sold	<u>4 000</u>	
Gross profit		13 500
Less Other expenses from ordinary activities		
Electricity	120	
Clipper sharpening	435	
Casual wages	4 230	
Shampoo	160	
Trailer hire (per annum)	2 000	
Petrol	610	
Interest on loan	15	
Insurance	<u>80</u>	<u>7 650</u>
Net profit		<u>\$5 850</u>

- d Calculate the contribution margin for each of the following (in both dollar and percentage terms):

	Sales	Variable costs	Fixed costs
i	80 000	23 500	12 150
ii	123 600	34 350	56 000
iii	36 720	12 950	4 300
iv	17 980	11 300	6 420
v	167 400	71 200	16 700

► Exercises 13.1 to 13.10, pages 689–91

Decision-making using the contribution margin

Learning objective 2 In CVP analysis the contribution margin is a valuable tool when determining whether to:

- add or delete a range of products to the business
- produce a one-off order at a reduced price.

The contribution margin is an effective tool in assisting decision-making relating to different product lines within a business. By comparing the contribution margin at varying levels of sales and/or variable costs, the business can gauge the value of the factor in question.

EXAMPLE 2**The contribution margin for particular product lines**

Peter Sample wants to determine if he should limit the varieties of pizzas offered in his pizza shop. His accountant has prepared the following information for three types of pizza – supreme, chicken and artichoke, and ham and pineapple:

Perfect Pizza
Contribution margin income statement
for the year ended 30 June 2010

	Supreme	Chicken and artichoke	Ham and pineapple
	\$	\$	\$
Sales	16 000	13 000	12 000
Less Variable costs			
Cost of goods sold	7 300	9 300	4 400
Cartage on sales	40	40	40
Delivery van expenses	615	310	300
Wages	3 250	1 400	1 600
Total variable costs	11 205	11 050	6 340
Contribution margin	4 795	1 950	5 660
	30%	15%	47%

This analysis shows Peter the following:

- Most revenue is generated by supreme pizzas.
- Supreme pizzas have the highest total variable costs.
- Ham and pineapple pizzas have the lowest variable costs.
- Ham and pineapple pizzas contribute 47 cents in each dollar of sales (47%) to the contribution margin (the largest contribution of any pizza type).
- Chicken and artichoke pizzas generate more revenue than ham and pineapple pizzas.
- Chicken and artichoke pizzas have a high total variable cost in comparison with ham and pineapple pizzas.
- Chicken and artichoke pizzas contribute significantly less to the contribution margin (15%) than the other pizza types.

Using this analysis, Peter must make some decisions if he wishes to eliminate a pizza variety. Interpreting the information from the comparative contribution margin income statement prepared by the accountant, Peter can see that the chicken and artichoke pizza makes the lowest contribution to the fixed costs and profit. The difficult part of Peter's decision is whether or not to remove this line of pizza, given that it generates a good proportion of the revenue.

A better solution for Peter might be to look at lowering the variable costs of the pizza through seeking alternative suppliers for the ingredients for this pizza (particularly the chicken and artichokes). If variable cost of the product (particularly the cost of goods sold) was lowered, the contribution margin would increase and so the overall contribution margin would improve. Alternatively, Peter may need to charge more for these pizzas and improve his sales revenue figures. This, too, would have the effect of increasing the contribution margin.

Peter would also consider other factors before making a final decision. Other factors to consider are:

- the economies of the market (price elasticity)
- customer preference
- future market trends.

Contribution margin analysis can also be used when a business is asked to produce a one-off order at a reduced price. This is illustrated in example 3.

EXAMPLE 3

The contribution margin for special cases

Perfect Pizza has been asked to participate in a school fundraising venture. The school has asked if it can purchase 100 pizzas for \$8 each. The variable cost per pizza is \$5.95.

The total sales dollars for this order would be:

$$\begin{array}{rcl} \text{Total sales} & = & \text{No. of units x Selling price} \\ \$800 & = & 100 \times \$8 \end{array}$$

The total variable costs would be:

$$\begin{array}{rcl} \text{Total variable costs} & = & \text{No. of units x Variable cost} \\ \$595 & = & 100 \times \$5.95 \end{array}$$

Therefore:

$$\begin{array}{rcl} \text{Total contribution margin} & = & \text{Total sales} - \text{Total variable cost} \\ \$205 & = & \$800 - \$595 \end{array}$$

The contribution margin percentage would be:

$$\frac{\text{Total contribution margin}}{\text{Total sales}} \times \frac{100}{1} = \frac{205}{800} \times \frac{100}{1} = 25.625\%$$

Peter can now decide whether to produce this one-off order at this price. His decision would be based on what he considers to be the minimum contribution margin acceptable to produce the order. Assuming that Peter produces supreme pizzas for a contribution margin of 30%, he may decide to accept the order if it has a contribution margin higher than this. In this case, he would not decide in favour of producing the order because the contribution to fixed costs per dollar of sales is only 25.6 cents (25.625% x \$1).

In Peter's case, however, as long as he has the capacity to produce the extra pizzas, then he should go ahead as some profit is always better than none.

For a one-off product, it would be a viable option if the product were contributing some contribution margin. If a new product were being considered as an addition to an existing range, then the product would normally be required to contribute a minimum percentage towards fixed costs.

When total capacity is known, total revenue is limited by this constraint. If the total contribution margin does not cover the total fixed costs, then production should not go ahead. The viability of the business would be in question and a decision about closing down or continuing operations would need to be made.

Review & practice 2

- a Use the following information to calculate the contribution margin (and contribution margin percentage) for each product. State which product is contributing the most towards fixed costs.

Contribution margin income statement for the year ended 30 June 2010

	Product A	Product B	Product C
	\$	\$	\$
Sales	640 500	321 460	712 800
Less Variable costs			
Cost of goods sold	271 300	103 580	321 070
Cartage on sales	10 260	7 420	11 400
Delivery van expenses	24 500	16 200	25 120
Wages – casual employees	142 300	130 450	145 850
Total variable costs	448 360	257 650	503 440
Contribution margin			
Contribution margin %	____%	____%	____%

- b i Tim's Ties has been asked to supply a major department store with ties. His normal selling price for the ties is \$18.50, but the department store is only prepared to pay \$14.00 per tie. The variable cost per tie is \$12.50 and the total fixed costs per annum are \$124 500. Tim sells 54 200 ties per annum. The department store has promised to purchase a minimum of 8 800 ties per month. Should Tim become the department store's supplier?
- ii What would the decision be if Tim was able to reduce the variable cost per tie to \$10.00 on the ties sold to the department store? What other factors might Tim have to consider before making a final decision?

Part 2 – Break-even analysis

Already know	<ul style="list-style-type: none"> The distinction between fixed and variable costs How to calculate the contribution margin
Need to know	<ul style="list-style-type: none"> How break-even is calculated
Using this knowledge	<ul style="list-style-type: none"> <i>Provide information for decision-making.</i> CVP analysis can assist businesses in making important managerial decisions regarding output levels and other sales-related decisions <i>Help evaluate performance.</i> CVP can be applied to certain sales levels to evaluate profit.

ACCOUNTING VOCABULARY

Break-even

Learning objectives

After completing this section, you should be able to:

- 1 understand what break-even analysis is, and how it is used in business for decision-making
- 2 calculate the break-even point using the contribution margin.

Break-even analysis

Cost-volume-profit (CVP) analysis is sometimes called **break-even analysis**. The break-even point is where: **Total sales = Total costs**

At the break-even point, profit is zero. Profit will be earned for each sale above the break-even point. Until the break-even point is reached, the business is operating at a loss.

Businesses are interested in knowing their break-even point for two main reasons:

- to know what level of sales (volume) they must achieve as a minimum to cover costs
- to assess whether the current price structure is appropriate. (Does it need to increase, decrease or remain at its current level – is the profit generated by the sales sufficient?)

For this reason, businesses will often require break-even analysis to be conducted at many different levels of projected sales and costs. Most businesses will also require this type of analysis to be carried out on a regular basis on actual figures to ensure that they have information for decision-making.

The break-even point can be calculated:

- in units (i.e. number of sales required to break even)
- as a dollar value (i.e. value of sales required to break even).



Break-even analysis calculates the break-even point where sales equals costs.

Learning objective 1

Learning objective 2

There are a number of methods that can be used for break-even analysis, but a simple method uses the contribution margin. Recall that the contribution margin is simply the difference between sales and variable costs. Once the contribution margin meets the fixed costs, the business is said to have 'broken even' – that is, profit is zero. After that, any contribution margin left over provides profit. For each sale above the break-even point, profit will be earned.

EXAMPLE 4

CDs Galore wishes to calculate its break-even point. The details are as follows:

Fixed costs (FC)	\$40 000
Variable costs (VC)	\$10 per CD
CD selling price (SP)	\$30 per CD

Calculate break-even sales (in units)	=	Fixed costs
Contribution margin per unit	=	Contribution margin per unit
	=	Selling price per unit – Variable costs per unit
	=	\$30 – \$10
	=	\$20
Break-even sales in units	=	\$40 000
	=	20
	=	2 000 CDs
Calculate break-even point (in dollars)	=	Fixed costs
Contribution margin ratio	=	Contribution margin ratio
	=	Contribution margin per unit
	=	Selling price per unit
	=	20
	=	30
	=	0.666 666
	=	\$40 000
	=	0.666 666
	=	\$60 000
Break-even point (in dollars)	=	Break-even sales (in units) x SP
	=	2 000 x \$30
	=	\$60 000

The contribution margin ratio can be calculated using total or unit values.

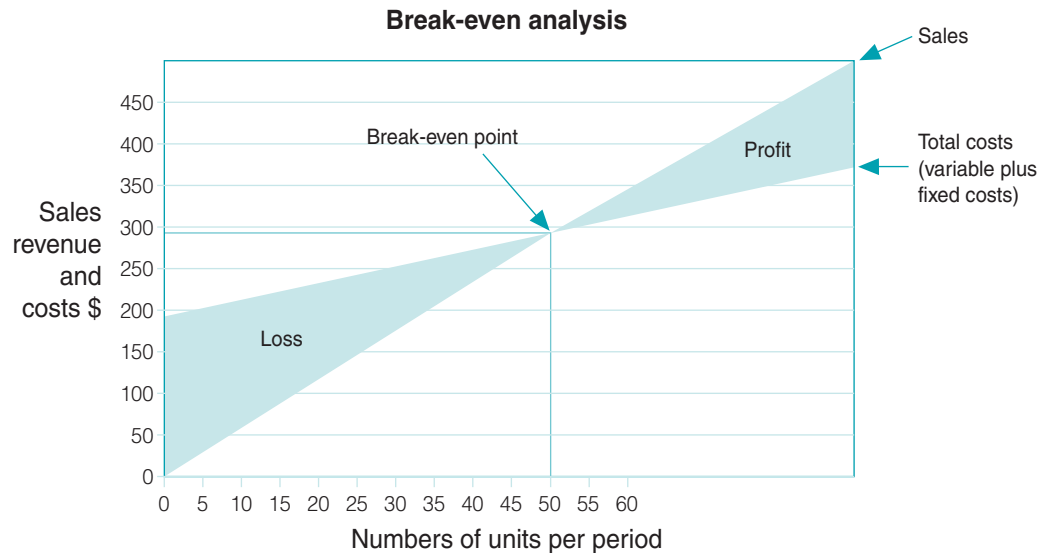
Break-even analysis using spreadsheets and charts

A spreadsheet provides a useful method for modelling break-even analysis, as variables can be trialled to assess the break-even point or the effects of changes.

Selecting the total costs and total revenue of the business at the given levels of output (sales units), the information can be plotted on a graph [13.1] to determine the break-even point.

	A	B	C	D	E	F	G
1	Break-even analysis						
2	Input:			Calculation:			
3	Variable costs per unit:	\$2.00		Total variable costs:	\$120		
4	Fixed costs	\$200.00		Total of all costs:	\$320.00		
5	Expected sales (units):	60		Total revenue:	\$360.00		
6	Price per unit:	\$6.00		Profit:	\$40.00		
7	Relevant range (from):	0					
8	Increments for range:	5					
9							
10		Units sold	Fixed costs	Variable costs	Total costs	Total revenue	Profit
11		0	200	0	200	0	-200
12		5	200	10	210	30	-180
13		10	200	20	220	60	-160
14		15	200	30	230	90	-140
15		20	200	40	240	120	-120
16		25	200	50	250	150	-100
17		30	200	60	260	180	-80
18		35	200	70	270	210	-60
19		40	200	80	280	240	-40
20		45	200	90	290	270	-20
21		50	200	100	300	300	0
22		55	200	110	310	330	20
23		60	200	120	320	360	40

[13.1]



Review & practice 3

a What sales are needed to break even, in units and dollar amount, for the following:

Selling price	FC	VC
\$10	\$16 000	\$4
\$23	\$86 000	\$11
\$56	\$102 000	\$32



- b What** are the sales (in units) needed to break even, in units and dollar amount, for the following:

Selling price	FC	VC
\$5	\$2 300	\$2.70
\$21.50	\$9 640	\$9.25
\$47.00	\$13 000	\$16.30

- c** Fill in the blanks with one of these: increases, decreases, stays the same.
- As the number of units sold increases, the variable cost per unit_____.
 - As the number of units sold increases, the total variable cost_____.
 - Total variable costs will decrease as the number of units sold_____.
 - As the number of units sold increases, the fixed cost per unit_____.
 - The total fixed cost will _____ as the number of units sold increases.

► Exercises 13.13 to 13.21, pages 691–2

Decision-making using break-even analysis

Break-even analysis allows a business manager/owner to answer various questions and to make decisions regarding:

- costs
- price
- sales volume
- profit

and the relationships between these elements over a range of activity (sales). Some questions that can be answered by using break-even analysis are:

- How many units must be sold to break even?
- If fixed costs increase/decrease, what is the effect on profit?
- If variable costs increase/decrease, what is the effect on profit?

Target profit

Break-even analysis gives only the break-even point; however, managers also wish to know the volume of sales required to achieve a targeted profit. The formula used to estimate the (sales volume) units for a target profit is simply the break-even formula with the target profit added to the fixed costs.

$$\text{Sales volume (units)} = \frac{\text{Total fixed costs} + \text{Target profit}}{\text{Contribution margin per unit}}$$

EXAMPLE 5

Details from example 4:
Fixed costs = \$40 000
Contribution margin per unit = \$20

CDs Galore needs to know the number of sales required to achieve a targeted profit of \$30 000.

$$\begin{aligned} \text{Sales in units} &= \frac{\text{Fixed costs} + \text{Target profit}}{\text{Contribution margin per unit}} \\ &= \frac{\$40\,000 + \$30\,000}{\$20} \\ &= 3\,500 \text{ CDs} \end{aligned}$$

Alternative proposals

When various options are available to a business, performing break-even analysis on each option will assist a manager to feel more confident in the decisions made.

EXAMPLE 6

Happy Henderson manufactures and sells one type of chair – an art deco creation – and his current output is 110 chairs per annum. The selling price is \$225 and the variable costs are \$52. Happy knows from past experience that fixed costs for a year are \$12 000 and that if he wants to increase sales to a desired level of 250 chairs he will have to (1) pay an assistant to help out at busy times (an additional variable cost of \$15 000) and (2) increase his advertising expense, which he estimates would cost him an additional \$5 000.

Happy's wife maintains that he will sell more if he simply reduces his selling price to \$200 per chair.

Which alternative should Happy choose?

Alternative A

Selling price	=	\$225/unit
Sales	=	250 chairs
Fixed costs	=	\$12 000
Variable costs/unit	=	$\$52 + \left(\frac{(15\ 000 + 5\ 000)}{250} \right)$
	=	52 + 80
	=	\$132

Contribution margin/unit	=	Selling price/unit – Variable cost/unit
	=	\$225 – \$132
	=	\$93/unit

Sales (units)	=	$\frac{\text{Total fixed cost} + \text{Target profit}}{\text{Contribution margin/unit}}$
250	=	$12\ 000 + \text{target profit} \div 93$
250 x 93	=	12 000 + target profit
23 250	=	12 000 + target profit
23 250 – 12 000	=	target profit
\$11 250	=	target profit

Alternative B

Selling price	=	\$200/unit
Sales	=	250 chairs
Fixed costs	=	\$12 000
Variable costs/unit	=	\$52
Contribution margin/unit	=	\$200 – \$52
	=	\$148
Sales (units)	=	$\frac{\text{Total fixed costs} + \text{Target profit}}{\text{Contribution margin/unit}}$
250	=	$12\ 000 + \text{target profit} \div 148$
250 x 148	=	12 000 + target profit
37 000	=	12 000 + target profit
37 000 – 12 000	=	target profit
25 000	=	target profit

Decision: Happy should listen to his wife!

Or, total variable cost
= (\$52 x 250) + 15 000
+ 5000 = \$33 000

Review & practice 4

- a What** sales are needed to break even, in units and dollar amount, for the following to achieve the given net profit figure?

Sale price per unit	Total FC	VC per unit	NP
\$10	\$16 000	\$4	\$25 000
\$23	\$86 000	\$11	\$42 000
\$56	\$102 000	\$32	\$36 000

- b What** are the sales (in units) needed to break even, in units and dollar amount, for the following to achieve the desired profit?

Sale price per unit	Total FC	VC per unit	NP
\$5.00	\$2 300	\$2.70	\$5 000
\$21.50	\$9 640	\$9.25	\$36 000
\$47.00	\$13 000	\$16.30	\$150 000

- c** Neil Pitt Pty Ltd produces 120 000 coffee pots per year. They sell for \$20 per pot. Variable costs per coffee pot are \$11.50. Fixed costs in total are \$240 000.

- i** Calculate the contribution margin.
- ii What** is the break-even point in units and dollars?
- iii** If desired profit is \$200 000, how many coffee pots must be made?

Part 3 – Costs of making a product or providing a service

Already know	<ul style="list-style-type: none"> Costs are considered in managerial decision-making Costs can be classified
Need to know	<ul style="list-style-type: none"> Costs involved in making a product or providing a service
Using this knowledge	<ul style="list-style-type: none"> <i>Provide information for decision-making on whether to buy or produce a product</i> <i>Provide information for decision-making on the cost of providing a service</i>

ACCOUNTING VOCABULARY

Direct labour

Direct materials

Overheads

Period costs

Product costs

Learning objectives

After completing this section, you should be able to:

- 1 distinguish costs as product or period costs
- 2 describe the many costs involved in making a product or providing a service.

Costs of manufacture/service provision

Businesses are constantly analysing the type and mix of products they sell. To determine what lines to sell or cease selling, the business must analyse the performance of that particular product in relation to its existing products. In order to do this, the managerial accountant must be able to isolate those costs that relate directly to the particular product or service being evaluated.

Product costs

Learning objective 1



Costs involved in making a particular good or providing a particular service are called **product costs**.

Product costs are all costs involved in the manufacture or provision of a particular good or service.

Expenses that are categorised as product costs are either direct materials, direct labour or overheads.

Direct materials These are materials that can be traced to a particular product or service. It is usually possible to look at the manufacture of a good, and determine exactly what the components of that good are. In the case of a pizza, the direct materials are the dough and toppings. For a car, some direct material costs are the engine, components, body, wheels, lights and upholstery. A dentist's direct materials are items used in the provision of dental services, such as amalgam, spatulas, swabs and so on. Some services would require more direct materials than others; for example, an accountant would require fewer direct materials than a dentist.

Direct labour For labour to be attributed to a particular product or service, the unit of labour must pertain directly to the product or service being analysed. In the case of pizza, the time it takes an employee to make and bake the pizza can be calculated. With a car service, the labour of the mechanic is easily identified. Direct labour is generally more easily identified for the provision of a service. For example, accountants and lawyers, in particular, are service providers who charge for their services based on the time they have 'booked' to a particular client.

Overheads Overheads are other costs that are incurred in the production of the good or service other than direct materials and direct labour. An attempt must be made to determine how much overhead is necessary to manufacture the product or provide the service. To make pizza, overheads such as electricity and rent are all necessary to get the product into its completed state, so they need to be included, though they cannot be traced directly to a particular product. Similarly, the car service incurs costs such as rent, telephone and electricity in providing the service to the customer. Overhead costs include indirect materials and indirect labours. These are costs associated with manufacture but are not easily traced to a particular product.

Period costs

Learning objective 1

Period costs that may occur in any business include the normal selling, administrative and finance expenses.



Period costs are non-product costs incurred but not directly required to produce a particular item or service.

Period costs are those expenses that appear in an income statement.

For a manufacturing business, advertising would be a period cost. The time taken for a bookkeeper to prepare the business records, or the interest charged on the business overdraft, are examples of period costs. These expenses cannot be related directly to one particular line of goods or services, but are still necessary to the successful running of the business and must still be covered by the sale of that good or service. They are different from overhead costs in that overheads are *directly* necessary for the production of the good or service.

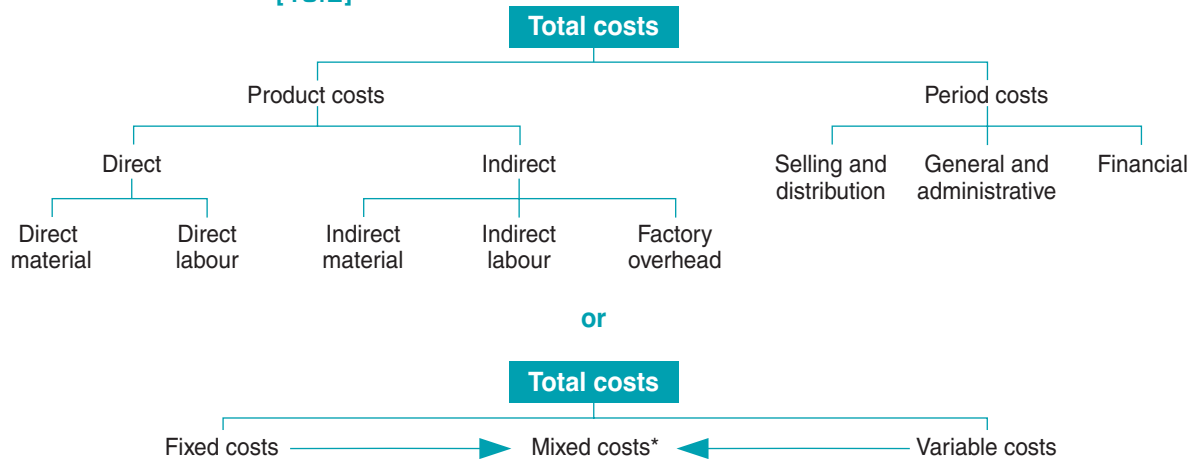
It is more difficult to distinguish product versus period costs for a service business than for a manufacturing business. Some would argue that all costs associated with a service business could be classified as period costs – other than direct labour costs or direct material costs (for some services). Some service businesses will in fact choose to treat all costs as period costs. Whether or not a business decides to classify its costs will always be a cost/benefit decision. Do the costs of categorising the cost elements outweigh the benefit obtained by more informative internal reports?

Total costs

Learning objective 2

Total costs are the sum of all costs; that is, the sum of product and period costs, or the sum of fixed and variable costs, depending on how the costs have been categorised. Costs are categorised in different ways, and [13.2] shows this breakdown graphically.

[13.2]



* Some costs exhibit both fixed and variable behaviours. It is assumed that they can be separated for break-even analysis

Decision-making – price-setting using manufacturing costs

A detailed analysis of the cost of a product and the total costs of production are necessary to determine a suitable selling price for the good or service. The price of a good is determined by many factors – economic, as well as accounting – and ultimately the customer accepts or rejects the price chosen, for various reasons.

Once a total unit cost has been determined, a mark-up can be added to determine a selling price. This method is often used in the preparation of job quotations. A job cost sheet is prepared showing four distinct calculations:

- direct material costs
- direct labour costs
- overheads – often calculated as a percentage of labour costs
- mark-up – a percentage of the total cost is added to the product costs to determine an overall price

EXAMPLE 7

A shutter manufacturer records the following list of costs for its sole product: red cedar shutters.

	\$
Direct materials	820 000
Indirect materials	215 000
Direct labour	1 600 000
Indirect labour	850 000
General and administrative	290 000
Finance	172 000
Selling and marketing	165 000
Depreciation – factory	30 000
Insurance – factory	2 300

If 100 000 metres of shutters are produced, calculate:

- 1 product costs, period costs, total costs
- 2 product unit cost and total unit cost
- 3 selling price if a 100% mark-up is added to total unit cost.



Product costs		Period costs	
	\$		\$
Direct materials	820 000	General and administrative	290 000
Direct labour	1 600 000	Finance	172 000
Overheads:		Selling and marketing	165 000
Indirect materials	215 000		
Indirect labour	850 000		
Depreciation – factory	30 000		
Insurance – factory	2 300		
Total product cost	\$3 517 300	Total period cost:	\$627 000

$$\begin{aligned}
 \text{Product unit costs} &= \frac{\text{Product costs}}{\text{Units produced}} \\
 &= \frac{3\,517\,300}{100\,000} \\
 &= \$35.17 \text{ per metre of shutter produced} \\
 \\
 \text{Total unit cost} &= \frac{\text{Total costs}}{\text{Units produced}} \\
 &= \frac{3\,517\,300 + 627\,000}{100\,000} \\
 &= \$41.44 \text{ per metre of shutter produced}
 \end{aligned}$$

The job being quoted requires 10.23 metres of shutters, so the selling price is quoted as:

$$\begin{aligned}
 \text{Total unit costs} &+ \text{Mark-up for profit} \\
 &= (41.44 \times 10.23) + 100\% \\
 &= 423.9312 + 100\% \\
 &= \$847.86
 \end{aligned}$$

Review & practice 5

Ian Fagan Plumbing has been asked to quote on a job for the Burpengary Forest retirement complex. Ian calculates materials required for the job to be \$4 500. He estimates his time to complete the work will be three days. He starts work at 7.30 am and finishes at 4.30 pm (with an hour off for lunch). He will work with his apprentice and estimates that the hourly rate for the two of them for labour will be \$52.

Ian factors in overhead costs at a rate of 20% of the direct labour costs and generally adds a mark-up of 100%, but, as his father-in-law is a resident at the retirement centre, he has agreed to do the job at a discount, so in this case his mark-up will be two-thirds of what he would normally charge. What is the figure that Ian quotes for this job?

Addressing GST

In this chapter, we have not addressed GST as a separate expense. In theory, GST is not a part of the selling price of a product, but is a tax charged by the government in addition to the business's selling price of its product. The GST should therefore not be included in assessing what is a suitable price for a business to charge for its services.

In reality, GST effectively increases the price of a product and therefore may have an impact on the demand for that product. Demand is the primary determinant of how many units will be sold at a particular price, and it affects the total sales figures that are used to complete any type of financial analysis.

Similarly, GST paid on purchases is not treated as a separate expense in this chapter. This is because any GST paid by the business is fully refundable from the government. It is only the end user of the product who pays the GST. This means then that GST is not a cost to the business.

Understandings

- Cost-volume-profit analysis is sometimes called break-even analysis. It calculates the break-even point, which is the point at which sales equal costs. Profit will be earned for each sale above the break-even point.
- Fixed costs remain the same as the level of activity changes.
- Variable costs change as the level of activity changes.
- The contribution margin is sales minus variable costs. A contribution margin income statement will show 'sales less variable costs = contribution margin'. The fixed costs are then subtracted from the contribution margin to calculate operating profit.
- The contribution margin is often used in decisions relating to closing down or continuing business, or in make-or-buy decisions.
- The product costs involved in making an item can be categorised as:
 - direct materials, which are materials that can be directly traced to the finished good
 - direct labour, which is labour that can be directly traced to the finished good
 - overheads, which include all the costs of making the product other than direct materials and direct labour.
- The product costs involved in providing a service can be categorised as:
 - direct labour, which is labour that can be directly traced to the service provided
 - overheads, which include all the costs of providing the service other than direct labour.
- The period costs that occur in any business include the normal selling, administrative and finance expenses.
- Total costs (product plus period) are particularly useful when making decisions about setting prices.

Exercises

★ 13.1 Fixed versus variable costs

Using an example, explain the difference between fixed and variable costs.

★★ 13.2 Fixed versus variable costs

- a** List six costs you would expect to find in the accounts of the following types of businesses: hairdresser, legal firm, tile retailer and an educational institution.
b Categorise these costs as fixed or variable.

★ 13.3 Categorising costs

Identify the following expenses for Bermuda Tyres as fixed or variable and justify your decision:

- | | |
|---------------------------|----------------------------|
| a grease | e franchise fees |
| b mechanic's wages | f advertising costs |
| c factory rent | g electricity |
| d gardener's wages | h tyres. |

★★ 13.4 Categorising costs

Some expenses can be fixed or variable, depending on the business in question. For example, franchise fees may be fixed (a flat rate is paid to the parent company) or variable (a percentage of sales is paid to the parent company). Consider another expense that may be fixed or variable, and explain your choice using an example.

★ 13.5 Contribution margin

You have prepared a contribution margin income statement for a business. The owner has asked you this question: 'The contribution margin is a contribution to what?' Answer the question in sentence form.

★ 13.6 Contribution margin



Write a well-structured paragraph explaining the difference between the contribution margin and gross profit.

★★ 13.7 Contribution margin income statement

From the following income statement, prepare a contribution margin income statement.

Harry's Hamburgers Income statement for the year ended 30 June 2010

	\$	\$
Sales		33 990
Less Cost of goods sold		<u>16 190</u>
Gross profit		17 800
Less Other expenses from ordinary activities		
Electricity	1 222	
Cartage on sales	674	
Administration	2 314	
Salaries	9 150	
Rent	520	
Bookkeeping expenses	400	
Equipment hire	1 230	
Interest on loan	57	
Insurance	<u>272</u>	<u>15 839</u>
Net profit		<u>\$1 961</u>

★★ 13.8 Contribution margin income statement

From the following information, prepare a contribution margin income statement.

Sounds Sensations General ledger – T-format (extract)					
Dr			Cr		
Date	Particulars	Amount \$	Date	Particulars	Amount \$
2010			2010		
Profit and loss summary a/c					
June 30	Materials	5 300	June 30	Sales	37 860
	Delivery van expenses	620		Discount revenue	230
	Supervisor salary	12 720		Interest received	55
	Licence	530		Rent revenue	1 200
	Commission	125			
	Advertising	840			
	Labour	15 200			
	Capital (net profit)	4 010			
		<u>\$39 345</u>			<u>\$39 345</u>

Sounds Sensations General ledger – columnar format (extract)				
Date	Particulars	Debit \$	Credit \$	Balance \$
2010				
Profit and loss summary a/c				
June 30	Materials	5 300		5 300 Dr
	Delivery van expenses	620		5 920 Dr
	Supervisor salary	12 720		18 640 Dr
	Licence	530		19 170 Dr
	Commission	125		19 295 Dr
	Advertising	840		20 135 Dr
	Labour	15 200		35 335 Dr
	Sales		37 860	2 525 Cr
	Discount revenue		230	2 755 Cr
	Interest received		55	2 810 Cr
	Rent revenue		1 200	4 010 Cr
	Capital (net profit)	4 010		0

★★ 13.9 Contribution margin calculations

Use the information provided on each line of the table below to calculate the missing figures.

	Total sales revenue	Total variable costs	Total contribution margin	Contribution margin ratio	Contribution margin %
i	50 000	25 000			
ii	100 000	60 000			
iii		40 000		0.6	
iv	131 200		82 000		
v		42 000	30 000	0.416	
vi		200 000	125 000		38.46

★★13.10 Contribution margin calculation

Megan's fixed costs are \$20 000. The selling price is \$24 each, and variable costs are \$15. Calculate Megan's contribution margin per unit and contribution margin ratio.

★★13.11 Contribution margin analysis

Fred's Fruit Shop sells many lines of fruit, but he has decided to limit the number of exotic fruit lines he carries and has asked you to help him do a contribution margin analysis. He has categorised his income statement as shown below, but needs help completing the analysis. Complete the analysis, and advise Fred which lines he should keep.

Fred's Fruit Shop
Contribution margin income statement
for the year ended 30 June 2010

	Star fruit \$	Custard apple \$	Nashi \$
Sales	2 300	3 500	800
Less Variable costs			
Cost of goods sold	890	1 105	160
Cartage on sales	520	700	75
Storage	300	580	120
Wages	160	235	65
Total variable costs	1 870	2 620	420
Contribution margin			
	%	%	%

★★13.12 Contribution margin analysis

Complete the following contribution margin income statement.

Contribution margin income statement
for the year ended 30 June 2010

	Product 1 \$	Product 2 \$	Product 3 \$
Sales	_____	250 000	500 000
Less Variable costs			
Cost of goods sold	100 000	120 500	_____
Variable costs	31 400	_____	62 000
Total variable costs	131 400	160 000	260 000
Contribution margin	48 600	_____	240 000
	____%	36%	____%

★★13.13 Break-even point

Explain why businesses calculate their break-even point.

★★13.14 Break-even point

- a** If the fixed expenses of a business increase, what will happen to the break-even point for that business? Explain, giving an example.
- b** If the selling price decreases, how is the break-even point affected? Explain your answer.

★★13.15 Break-even point

Majella Manufacturing has determined that fixed costs will be \$720 000 and that the variable costs for the year will be \$0.70 per unit. The variable costs are directly proportional to sales. Sales for the coming year are estimated to be 1 000 000 units at \$1.50 per unit.

- a** Calculate the break-even point as a dollar value.
- b** Calculate the break-even point as volume of sales.

★★13.16 **Break-even point**

You have received a letter asking for advice. The owner of Sally's Solarium has calculated that her break-even point will be lower if she raises the price of her product. She wants to know whether this means she should raise her price to reduce the risk of incurring a loss. Prepare a reply to Sally in the form of a memorandum.

★13.17 **Break-even analysis**

Polly's Dog Wash is a new business. Polly is completing her business plan and needs to ascertain her break-even point in units and dollars, and wants to calculate what her profits will be at certain sales levels. She has given you the following information and asks you to do the calculations for her.

Fixed costs	\$200/week
Variable costs	\$4/unit
Dog wash price (each)	\$25

Polly knows that she can manage only 30 dog washes per week. What is Polly's profit each week?

★★13.18 **Break-even analysis**

John is a mechanic who performs mobile car services. He knows his business is in trouble and needs your help. He has provided you with these financial details:

Fixed costs per week	\$600
Variable costs per service	\$38.50
Price charged per service	\$98.00
Current number of services per week	8

- How much profit per week is John making?
- What is the minimum price John can charge to cover expenses?

★★13.19 **Break-even analysis**

Michael runs a business that currently sells 4 200 units per week. His fixed costs are \$1 350, and variable costs are \$3.50 per unit. What price must he charge per unit if he wishes to break even?

★★★13.20 **Break-even analysis**

Madonna Airlines flies from Brisbane to Cairns. It offers two types of tickets: first class and economy class. The airline is considering offering just one type of ticket, economy, and charging \$350 per person. The variable cost per person is \$80, and fixed expenses per month are \$600 000.

- Calculate the number of tickets Madonna Airlines must sell per month to break even if it introduces the economy fare.
- If Madonna Airlines reduces the cost per ticket to \$280, what will be the new break-even point in units and sales?
- Variable costs can be reduced to \$75 per person if no afternoon tea is provided. What would the new break-even point be for both ticket prices?

★★13.21 **Break-even analysis**

'When a business wishes to know how many units need to be produced to break even, as opposed to how many dollars of sales, then variable costs need to be expressed as a percentage of the selling price per unit.' Explain why this is true.

★★★13.22 **Break-even decision-making**

Sports-X-treme is owned by Phillip. Phillip wants to spend some money on advertising to boost sales. He knows that he can achieve sales of 10 000 units when the unit price is \$50. The fixed costs of the business total \$4 000 and variable costs are \$4 per unit. Phillip needs to maintain a net profit of \$8 000. By conducting CVP analysis, help Phillip decide how much he can spend on advertising if the selling price cannot exceed \$5.50.

★★★13.23 Break-even decision-making

Terrific Toys has been approached to manufacture a special line of toys. It is estimated that these toys would sell for \$25 each, and would cost \$16 to manufacture. Fixed costs are \$100 000. Based on the contribution margin, how many toys would have to be sold before a profit was made? If an order of 3 000 per month could be guaranteed, how long would it take the company to make a profit?

★★★13.24 Break-even decision-making

Jackie is contemplating going into business for herself. She has seen a bowling alley for lease in the small business section of the newspaper. It has 10 alleys, each of which can accommodate eight players. The alley is open for four hours a day, every day of the week, 50 weeks per year, and each game takes one hour.

Jackie estimates the following:

Average revenue	\$18 per game
Variable cost per game	\$4 per game
Salaries	\$130 600 per year
Cleaning (premises)	\$600 per month
Replacement of balls and shoes	\$1 000 per month
Electricity, advertising, telephone	\$1 900 per month
Rent	\$5 000 per month

Calculate the annual break-even sales for the bowling alley if it operates at maximum capacity. Also calculate the amount of sales necessary to earn \$360 000 for the year. How many games does Jackie have to sell in order to make this profit? Should she open the business?

★★13.25 Break-even decision-making

What are some examples of decisions businesses can make based on the results of their break-even analysis?

★13.26 Break-even decision-making

Star-Thomas Enterprises has a maximum production capacity of 4 000 units. Each unit sells for \$200 each. At this level of output the estimated fixed costs are \$100 000 and variable costs are \$30 per unit.

- a** Determine the break-even point in dollars and units.
- b** For the next financial year the firm's manager, Hugo Star-Thomas, wishes to aim for a net profit of \$30 000. How many units will need to be sold to achieve this profit objective?

★13.27 Break-even decision-making

Rhiannon and Georgia are manufacturers of umbrellas. Their fixed costs are \$310 000 and variable costs are 70% of sales. Selling price per umbrella is \$45.

- a** Calculate the break-even point in units.
- b** Ascertain the profit (loss) to be expected given sales of \$599 985.
- c** Determine the sales in units required to return a profit of \$20 000.

★★13.28 Break-even decision-making

Gerard Industries manufactures reversible raincoats. During the past year it sold 1 500 raincoats at \$120 each. The accounts revealed that the fixed costs associated with the manufacture of these products were \$30 000 and that the variable costs of manufacture were \$25 per raincoat.

- a** Design a spreadsheet to calculate the break-even point in dollars and units of sale.
- b** Prepare a graphic presentation of the break-even point.
- c** Determine the adjusted break-even point and profit, given the following what-if situations. Which is the best option?
 - i** \$5 increase in variable costs
 - ii** 10% increase in both fixed expenses and the number of items sold
 - iii** 20% decrease in fixed expenses, a 20% decrease in selling price per unit, a 15% decrease in variable expenses per unit, and a 30% increase in the number of units sold.

★★13.29 CVP analysis using the contribution margin approach

The Kirwan Cinema is an independent theatre operated by Charles Bronson. The theatre has 250 seats and operates each evening (seven nights a week) for one session. It sells, on average, tickets for 60% of its capacity. Tickets sell for \$15 each.

Costs incurred by the owner are:

- C Bronson's salary – \$1 500 per week
- wages for ticket booth employee – \$400 per week
- cleaning charges – \$400 per week
- rental of premises – \$2 400 per month
- distributor's fees for movies – \$1 000 per session
- electricity – \$800 per month.

- a** Prepare a contribution margin income statement for Kirwan Cinema.
- b** Calculate the number of tickets required to be sold per week to break even.
- c** Calculate the number of tickets required to be sold to clear \$1 000 in profit per week.
- d** For the period directly after Christmas when, traditionally, blockbuster movies are released, the Kirwan Cinema has a capacity crowd in each session for four weeks, selling 250 tickets per session. If the cinema were able to sell its capacity seating in each session for 52 weeks of the year, what is the maximum achievable profit for Mr Bronson?

★★13.30 CVP analysis using the contribution margin approach

Suzy Roden operates a shoe restoration business. She dyes or covers shoes to match a special outfit. She is in high demand for formals and weddings. She charges \$100 per pair of shoes dyed or covered, and averages restoration of 20 pairs of shoes per week. Materials and dyes per pair of shoes cost \$15. Other weekly costs are:

- electricity – \$80
- machine maintenance – \$10
- rental of shop premises – \$300
- wages – \$450.

- a** Analyse Suzy's costs and revenues to determine her contribution margin income statement.
- b** What is Suzy's contribution margin per unit?
- c** How many shoes does Suzy need to restore each week to break even?
- d** How many shoes does Suzy need to restore to achieve a profit of \$500 per week?
- e** What is an appropriate selling price Suzy should charge to make a weekly profit of \$1 000 at her current sales level (20 pairs per week)?

★★★13.31 CVP analysis using the contribution margin approach

Ciaran manufactures a spoon for feeding children that doubles as a toy to entice them to feed. The spoon sells for \$20. The variable costs are \$12 and fixed costs are \$30 000.

- a** Calculate contribution margin per unit, contribution margin ratio, break-even units and break-even dollars.
- b** What if the normal selling price is \$24 rather than \$20? What is the revised break-even figure in sales units?
- c** If variable expenses for the product change to \$15, how does this impact on break-even in dollars and units?
- d** Rental costs for her business increase by 30%. How does this impact on total fixed costs and break-even in dollars and units?
- e** If Ciaran is happy to have a profit of \$60 000 per year with fixed costs at a total of \$30 000 and variable costs at \$12/unit, what does total revenue from sales need to be to achieve this figure, and how many units need to be sold?
- f** Ciaran receives a proposal from a company in Sydney to sell 10 000 spoons at \$15 each. She has the capacity to deal with this size of order. Should she accept it?

★★★13.32 Decision-making

Mandy Simon is treasurer of the local Lions Club. She is considering running a Christmas art union for the club. Prizes will cost \$14 200. Ten ticket sellers will be employed to sell tickets in the community at a one-off cost of \$100 each plus 10% of the ticket price. Registration of the art union will be \$150, and printing of tickets is \$250 for between 2 000 and 10 000 tickets.

- a** What are the fixed and variable costs for the art union?
- b** Prepare a break-even analysis for the club based on ticket prices at \$2, \$5 and \$10 and sales of between 2 000 and 10 000 tickets.
- c** What sales of tickets would be required if the union wants to achieve a profit of \$10 000?
- d** What other factors need to be considered because they could impact on the success of the union?
- e** What recommendations will Mandy make regarding the art union?

★★★13.33 Decision-making

Sandy Dee's newsagency operates in downtown Charleville. A new shopping complex is currently being built, and Sandy has made some initial investigations to determine whether or not she should relocate to the new centre.

Sandy's income statement for the year ended 30 June 2010 is shown below for sales of \$5 per unit:

Sandy Dee's Newsagency Income statement for the year ended 30 June 2010

	\$	\$
Sales		500 000
Less Cost of goods sold		<u>320 000</u>
Gross profit		180 000
Rent	26 000	
Other variable expenses	50 000	
Fixed expenses	<u>24 000</u>	<u>100 000</u>
Net profit		<u>\$80 000</u>

Sandy's investigations show that rent in the new centre is \$3 000 per month. In addition, a \$1 000 charge is made annually for centre-based promotions. Sandy estimates that her other fixed costs would increase by \$4 000 per annum. Other variable costs would continue to be 10% of sales.

- a** What is the break-even point (in dollars) at Sandy's current location?
- b** What would the break-even point (in dollars) be if Sandy moved to the new centre?
- c** If Sandy wanted to increase profit by \$20 000, what level of sales would be required to reach this target?
- d** What factors need to be weighed up before Sandy can decide to move her business to the new centre?
- e** Should Sandy move her business to the new centre?

★★★13.34 CVP analysis and decision-making

Katherine's Kites sells kites in kits. Her fixed expenses are \$16 000 per year. Each kit is sold for \$22. Variable expenses are \$15.40 per kit.

- a** Calculate the break-even units using the contribution margin approach.
- b** Calculate the break-even dollars using the contribution margin approach.
- c** Check your calculation for break-even dollars by using the CVP equation method to calculate the break-even dollars.
- d** If Katherine sells 5 400 kits, what would be the profit or loss?
- e** How many kits would Katherine's Kites need to sell to make a profit of \$30 000?
- f** Katherine believes that she can increase sales to 6 000 kits, and consequently increase profits, if she either:
 - i** decreases the selling price to \$20 per kit, or
 - ii** maintains the selling price at \$22 per kit and offers a \$1 sales commission to kite kit sellers for each kite kit sold.

Decide which option is best for Katherine.

★★★13.35 CVP analysis and decision-making

The Cap Company manufactures caps for sale as souvenirs favoured by tourists at theme parks (Wet n' Wild, Movieworld, Dreamworld and Seaworld). They also have a sporting range (Broncos, Bullets, Cowboys, Lions), which is sold for \$22 each at sports venues. All caps are purchased at \$5 each (from China). The Cap Company then attaches the different labels at its factory in Toogoolawah. The labels are also manufactured to design specifications in China at a cost of \$3 per cap. The labour costs for the factory are fixed at \$10 000 per week. Rent of the factory premises is \$3 000 per week. Electricity costs are \$150 000 per year. Cleaning of the factory is \$1 000 per week, and maintenance is \$50 000 per year. Telephone costs are \$6 000 per year.

- a** What is the contribution margin per cap?
- b** What number of caps need to be sold per year to break even?
- c** How many caps need to be sold to earn a profit of \$10 000 per month?
- d** Should the company consider one of the following options:
 - i** decrease selling price to \$20 if caps can be sourced for \$3 each and \$2 for labels; or
 - ii** find cheaper factory premises at \$2 000 per week and maintain all other variables.

★★★13.36 CVP analysis and decision-making

Jane Pitt owns a coffee shop franchise, which is part of the Glory Beans chains. She requires some analysis of four of her products with respect to sales (volume), costs (expenses) and profit. Analyse the following information about one week of trading in Jane's coffee shop:

	Cappuccino	Mocha	Chai Tea Latte	Iced Mint-Choc Deluxe
Selling price	\$3.50	3.70	3.00	4.00
Variable cost	.90	1.00	.80	1.60
Sales – Monday	100	40	10	23
Sales – Tuesday	120	42	5	12
Sales – Wednesday	140	22	0	25
Sales – Thursday	140	35	0	26
Sales – Friday	180	25	0	21
Sales – Saturday	250	39	8	22
Sales – Sunday	No trading	No trading	No trading	No trading

Total fixed costs of operating the shop are \$10 000 per week.

- a** Prepare a contribution margin income statement for Jane, assuming the same sales figures for 52 weeks of the year.
- b** Jane needs to know:
 - i** contribution margin per product
 - ii** which products she could drop from the mix to make way for a new berry frappe
 - iii** how many of each product she needs to sell per week to break even
 - iv** the total dollar value for each product that she needs to sell to break even each week
 - v** how much she needs to sell in total if she wishes to make a profit of \$100 000 over a year by selling only cappuccinos. Is this level of sales for the year feasible based on current sales of this beverage each week?
- c** Jane is considering a proposal to purchase the property next door. She anticipates that the increased space for the coffee shop will double sales in each product. What is Jane's break-even figure in units and dollars for each product for the new store? Would this be a positive decision for Jane?

★13.37 Distinguishing product versus period costs

The following information has been extracted from the books of Geddes Manufacturing.

- a** Classify the following costs as product or period costs.
- b** If 200 000 units were produced, calculate the product unit cost and the total unit cost.

	\$
Royalties on patents used in production	4 000
Wages of supervisory factory staff	76 000
Wages of sales staff	89 000
Direct manufacturing labour	98 000
Purchases, direct materials	41 000
Advertising	5 000
Factory maintenance	20 000
Transport expenses – direct materials	2 000
Interest on loan	1 000
Rent – factory	10 000
Marketing expenses	7 000
Depreciation – sales office equipment	2 000
Indirect manufacturing labour	55 000
Light and power – factory	6 000
Light and power – sales office	4 000
Selling expenses	23 000
Depreciation on factory equipment	3 000
Depreciation on sales vehicle	4 000
Maintenance – factory machines	10 000
Indirect materials	29 000
Cartage inwards – indirect materials	1 000
Rent – office	10 000

★★★13.38 Product versus period costs

Consider the following list of accounts in the ledger of Vy Dinh. From the list below, distinguish the product costs from the period costs. If a total of 500 000 units are produced, calculate the product unit cost and the total unit cost.

Accounts	\$
Accountancy fees	10 000
Accounts payable control	353 000
Accounts receivable control	363 200
Accumulated depreciation – furniture	40 000
Advertising	15 000
Bad and doubtful debts	2 000
Buildings	100 000
Capital	503 900
Cash at bank	52 000
Cash in hand	4 760
Commission received – sales	40 000
Delivery vehicle expenses	12 000
Delivery vehicles	70 830
Depreciation – factory equipment	12 000
Depreciation – vehicles	2 900
Direct mail selling expense	6 500
Direct manufacturing labour	242 490
Direct manufacturing materials	300 000
Drawings – Vy	17 000
Electricity – office	1 500
Electricity – factory	4 500
Equipment – office	49 000
Factory equipment	200 000
Factory maintenance	16 000
Factory salaries	129 000
Furniture and fittings	120 000
GST clearing	600
Indirect manufacturing labour	57 430
Interest revenue	8 540
Inventories – partly finished goods	54 000
Inventories – raw materials	82 000
Inventories – finished goods	357 000
Land	90 000
Loan to B Addison (due 30/3/2013)	40 000
Mortgage	50 000
Office salaries	345 000
Patent rights	16 000
Petty cash	500
Postage	2 490
Rates	39 000
Sales	1 407 000
Sales salaries	234 000
Shares in Maxwell Co.	20 000
Stationery	4 900

RD5

Cash budgeting

- Budgets
- Preparing cash budgets
- GST receipts and payments
- Cash budgets and spreadsheeting
- Analysing cash budgets
- Writing the report

14

Chapter

Cash budgeting

Already know

- Cash is an important asset
- Cash must be controlled to protect against fraud and theft
- Most business transactions result in cash
- Spreadsheets are a tool used by accountants

Need to know

- Preparation of cash budgets incorporating:
 - statement of estimated receipts from accounts receivable, excluding bad debts
 - statement of GST liability or reclaimable, excluding bad debts
 - both debit and credit bank balances
- Interpretation of cash budgets to make decisions and/or recommendations
- Design and construction of a spreadsheet template with input and report areas

Using this knowledge

- *Provides information for decision-making* by giving management guidelines on what the cash position of the business will be if a given course of action is taken. It allows for variables to be tested before being implemented in the business
- *Assists in evaluating performance* by enabling comparisons to be made between actual and budgeted amounts (variance). The variances highlight discrepancies between budgeted and actual amounts, and consequently allow managers to evaluate the overall effectiveness of the business's objectives and decide on the areas where future improvements are necessary
- *Assists in discharging accountability* by highlighting areas of the business that are performing at certain levels

ACCOUNTING VOCABULARY

Budget	Statement of GST liability
Cash budget	Statement of GST reclaimable
Deficit	Surplus
Profitability	Variance analysis
Shortage	Viability
Statement of estimated accounts receivable	

Learning objectives

After completing this chapter, you should be able to:

- 1 prepare a cash budget, incorporating:
 - statement of estimated receipts from accounts receivable
 - statement of GST liability and reclaimable
 - both debit and credit bank balances

- 2 design and construct a spreadsheet template, with input and report areas
- 3 interpret a cash budget to make decisions and/or recommendations.

Budgets

Two main objectives of accounting are to provide information to interested parties for decision-making purposes and to evaluate the performance of the business. The income statement, balance sheet and cash flow statement provide information to users based on the past performance of the business. However, managers need special-purpose reports to carry out their planning and control responsibilities and to assist in predicting the future events of the business. This is achieved through the preparation of **budgets**, which can take many forms and have many supporting sub-budgets, such as sales budgets and capital expenditure budgets.



A **budget** is a forecast of future events expressed in quantitative terms.

Cash receives considerable attention in the budgeting process because all transactions ultimately affect cash. A **cash budget** is of particular importance to a business because it illustrates the business's ability to generate cash for timely repayment of debts and to achieve future objectives. A business can better manage its cash by expressing its plan for the receipt and payment of cash during a future budget period. A cash budget does this by recording the expected cash amounts to be received and paid in a specified time period. It shows the anticipated cash balance for a period and highlights whether the business has a cash surplus that can be invested; or, in the case of a cash shortage, financial arrangements (such as an overdraft or loan) may need to be organised. Therefore, the budget is an important management tool that indicates the business's viability because it cannot operate without access to cash.



A **cash budget** is an internal control that forecasts the expected receipts, expected payments and anticipated cash position of a business over a period of time.

Cash budgets are recorded in monetary terms. The application of the monetary assumption, combined with materiality, means that transactions are usually recorded in whole dollars only.

Preparing cash budgets

Learning objective 1

As stated previously, a cash budget consists of expected payments and expected receipts, and an analysis of the anticipated cash position over the period of the budget. Some businesses operate purely on a cash basis. For these businesses, preparing a cash budget is a relatively straightforward matter of recording expected receipts and payments into the cash budget format.

For businesses that utilise credit facilities as well as cash, the cash budget becomes more complex with the need to determine the cash component in credit transactions. A major consideration for businesses that sell on credit is the analysis of accounts receivable to determine when cash will be received. For these businesses, a schedule of estimated receipts from accounts receivable is prepared that shows the calculation of the expected receipts from credit sales in the budget months. A further issue to be considered is the cash received and paid for GST.

Once the cash components of all receipts and payments have been determined, the resulting cash position for the period is calculated. An analysis is conducted to determine what course of action (if any) needs to be taken with respect to the projected cash position.

GST is considered in detail on pages 707–9.



There are three main steps in preparing a cash budget:

Step 1 Determine expected receipts of cash

- | | |
|----------------------------|-----------------------|
| a from cash sales | c from GST |
| b from accounts receivable | d from other receipts |

Step 2 Determine expected payments of cash

- | | |
|------------------------|----------------------|
| a for cash purchases | c for GST |
| b for accounts payable | d for other payments |

Step 3 Calculate the cash balance/s

Determine the cash balance at the *end* of the period as follows:

- Insert the *opening* balance of cash from the beginning of the period.
- Total receipts from step 1 and total payments from step 2, then calculate the difference between receipts and payments.
- Calculate each end-of-month balance of cash (add steps 3a and 3b).

Review & practice

1

- What** is a cash budget?
- What** is the purpose of preparing a cash budget?
- Why** are budgets important management tools?

EXAMPLE 1

Without GST

This example shows the budget process without the consideration of GST.

John Kendall owns and operates a television sales and repair business, John's TV Sales and Repairs. He is considering expanding his business. He has been told by his bank that he needs to prepare a cash budget for the next two months (January and February) before a loan can be approved. Cash is received from sales and TV repairs. John makes cash and credit sales. Cash sales are recorded in the month in which the sales are made.

- Expected receipts from cash sales and TV repairs are:

Month	Cash sales	TV repairs
January	\$7 500	\$3 200
February	\$9 600	\$1 800

- Credit sales are calculated based on the following:
 - 80% of credit sales are normally received in the month following sales
 - 20% of credit sales are collected in the second month following sales.
- Credit sales are:

	Month	Credit sales
Actual	November	\$5 000
	December	\$6 000
Expected	January	\$3 000
	February	\$5 000



- In February it is anticipated that equipment will be sold for \$400. Commission of \$200 and \$230 is expected in January and February, respectively.
- Cash and credit purchases are also made. Cash purchases are recorded in the month in which the purchases occur. Expected cash purchases are:

	Month	Cash purchases
Expected	January	\$3 200
	February	\$4 100

- All credit purchases are paid within 30 days from the last day of the month in which the purchases are made. Credit purchases are:

	Month	Credit purchases
Actual	December	\$3 100
Expected	January	\$3 000
	February	\$5 000

- Each month, John pays \$400 for bookkeeping and \$500 for rent.
- John's bank balance as at 31 December was \$7 800 Dr.

To complete John's TV Sales and Repairs cash budget, we need to complete the three steps outlined earlier.

Step 1



Determine expected receipts of cash

a Receipts from cash sales

Cash sales are recorded in the cash budget in the month in which they occur.

In John's case, the expected receipts for January and February are composed of two types, cash sales and TV repairs. For cash budget purposes, both types of sales are added together, giving total cash sales of \$10 700 (\$7 500 + 3 200) and \$11 400 (9 600 + 1 800). These amounts are recorded next to the line 'Sales – cash' under the appropriate month in the cash budget (see [14.2], page 704).

b Receipts from accounts receivable

As there is a delay in the collection of cash from credit sales, it is necessary to prepare a schedule of estimated receipts from accounts receivable. The schedule calculates the expected cash receipts from accounts receivable during the budgeted period (see [14.1]).

[14.1]

From November sales, only the proportion that will be received in the budget period is required. Since 80% of cash will be received in December, only calculate the receipt of cash for January.

The credit sales in February will not generate any cash for the cash budget period, so no calculation is necessary.

Schedule of estimated receipts from accounts receivable			
Month	Credit sales	January	February
November	5 000	Sales x 20%	
December	6 000	Sales x 80%	Sales x 20%
January	3 000		Sales x 80%
February	5 000		
Schedule of estimated receipts from accounts receivable			
Month	Credit sales	January	February
November	5 000	1 000	
December	6 000	4 800	1 200
January	3 000		2 400
February	5 000		
		<u>\$5 800</u>	<u>\$3 600</u>

c Receipts from GST

GST will be dealt with in example 2.

d Cash from other receipts

At this point, any other receipts are recorded in the cash budget in the month in which they occur. These include anticipated receipts from the sale of an asset and receipts from dividends or any other receipt of cash.

John expects to receive commission in both months. These amounts (\$200 in January and \$230 in February) would be recorded in the cash budget next to the heading 'Commission'.

In February, equipment will be sold and \$400 is expected from the sale. Because the sale of an asset is classified separately from sales of inventories, this amount is recorded under a separate heading in the cash budget.

As a result of step 1, the section of the cash budget dealing with receipts of cash is presented as shown in [14.2].

[14.2]

John's TV Sales and Repairs
Cash budget for January and February 2010 (extract)

	January \$	February \$
Expected receipts		
Sales – cash	10 700	11 400
Accounts receivable	5 800	3 600
Commission	200	230
Sale of equipment		400
Total expected receipts	<u>16 700</u>	<u>15 630</u>

Step 2



Determine expected payments of cash

a Payments for cash purchases

Cash purchases are recorded in the cash budget in the month in which they are incurred. These figures are based on purchases made in the past, or they can be calculated as a percentage of expected sales.

John's cash purchases are \$3 200 in January and \$4 100 in February. These amounts are recorded in the cash budget next to the heading 'Purchases – cash' (see [14.4], page 705).

b Payments for accounts payable

It is normal practice for a business to pay its accounts payable in the month following the credit purchases (that is, within 30 days from the last day of the month in which the purchases were made). A schedule of expected payments to accounts payable can also be prepared and would appear as shown in [14.3].

[14.3]

Schedule of estimated payments to accounts payable

Month	Credit purchases \$	January \$	February \$
December	3 100	3 100	
January	3 000		3 000
February	5 000		
		<u>\$3 100</u>	<u>\$3 000</u>

Purchases in
February will
not be paid
until March.



c Payments for GST

GST will be dealt with in example 2.

Non-cash items are book entries only. There is no exchange of cash involved.

d Cash for other payments

Other expected payments during the budget period are now recorded. It is important at this stage to identify any **non-cash items** that may be incorporated with other expense categories. For example, if general and administrative expenses include depreciation, the amount for depreciation must be removed because it is not a cash transaction. Other expected payments that are included at this point are interest payments, purchase of assets or payments of loans.

John anticipates that he will have two other categories of expenses to pay in January and February, those being bookkeeping charges and rent. The amounts for bookkeeping, \$400 in each month, will be recorded in the cash budget next to the heading 'Bookkeeping'. Rent of \$500 will also be recorded in both months, next to the heading 'Rent'.

As a result of step 2, the section of the cash budget dealing with payments of cash is presented as shown in [14.4].

[14.4]

John's TV Sales and Repairs
Cash budget for January and February 2010 (extract)

	January \$	February \$
Expected payments		
Purchases – cash	3 200	4 100
Accounts payable	3 100	3 000
Bookkeeping	400	400
Rent	500	500
Total expected payments	7 200	8 000

Step 3



Calculate the cash balance

The last section of the budget requires calculating the projected cash balance at the end of the period. This section includes:

- the opening cash balance
- the difference between receipts and payments – surplus (shortage)
- the closing cash balance.

John's bank balance at 31 December 2009 is \$7 800. This becomes the opening bank balance at 1 January and is entered in the first month of the budget.

The difference between the receipts and payments for each month is calculated and recorded in the appropriate column next to the heading 'Receipts less payments: surplus (shortage)'. If the receipts are expected to be more than the payments, then the result is a surplus. If the payments are expected to be more than the receipts, then the result is a shortage and is entered in brackets (or as a negative if using a spreadsheet application) in the appropriate month. For January, receipts (\$16 700) less payments (\$7 200) equal \$9 500.

Finally, the closing cash balance is calculated by adding the opening cash balance for the month and the surplus (shortage) for the month. This closing amount for January then becomes the opening cash balance for the next month, February. The same procedure is followed to calculate the February closing cash balance [14.5].

[14.5]

John's TV Sales and Repairs
Cash budget for January and February 2010 (extract)

	January	February
	\$	\$
Cash balance (opening)	7 800	17 300
Receipts <i>less</i> payments: surplus (shortage)	9 500	7 630
Cash balance (closing)	<u>\$17 300</u>	<u>\$24 930</u>

The completed cash budget for John's TV Sales and Repairs now appears as shown in [14.6].

[14.6]

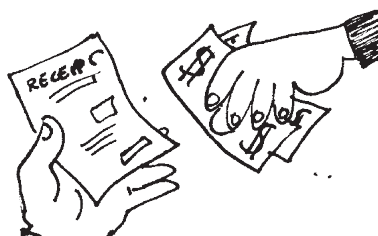
John's TV Sales and Repairs
Cash budget for January and February 2010

	January	February
	\$	\$
Expected receipts		
Sales – cash	10 700	11 400
Accounts receivable	5 800	3 600
Commission	200	230
Sale of equipment		400
Total expected receipts	<u>16 700</u>	<u>15 630</u>
Expected payments		
Purchases – cash	3 200	4 100
Accounts payable	3 100	3 000
Bookkeeping	400	400
Rent	500	500
Total expected payments	<u>7 200</u>	<u>8 000</u>
Cash balance (opening)	7 800	17 300
Receipts <i>less</i> payments: surplus (shortage)	9 500	7 630
Cash balance (closing)	<u>\$17 300</u>	<u>\$24 930</u>

Review & practice 2

- a What** is the purpose of preparing a cash budget?
- b What** are five types of receipts and five types of payments that could be included in a cash budget?
- c How** does a cash budget assist managers to plan for the future?

► Exercises 14.1 and 14.2, page 725



GST receipts and payments

Business may use a different basis for calculating GST than they use for general accounting purposes.

John's TV Sales and Repairs is a useful example of how to complete a simple cash budget. However, GST is an unavoidable consideration for all businesses. GST is charged and paid on most goods and services, and the cash flow from this activity must be incorporated into the projected receipts and payments for a given budget period.

There are two ways in which the amount of GST remitted to the ATO can be determined for businesses with a turnover of less than \$1 million. Businesses must use one of these methods:

- accrual basis
- cash basis.

The accrual basis of accounting for GST differs from the cash basis because GST is remitted according to the total sales and purchases (of all goods and services) regardless of whether the cash has been received or paid. For example, GST is remitted for a credit sale although the cash for the credit sale is received at a later date. Similarly, input tax credits are claimed for goods and services purchased on credit whether or not these accounts have been paid. Therefore, businesses using the accrual method will need to ensure sufficient cash is available to pay the ATO.

If a business elects to use the cash basis, then GST is remitted and claimed only for those amounts actually received (GST liability) or paid (GST reclaimable).

The following assumptions regarding GST apply to this chapter:

- The basis for accounting for GST is the accrual method.
- GST is paid (remitted) monthly in the month following the sale or purchase of goods and services.
- All figures for the sales and purchases of goods, services and assets are inclusive of GST.

EXAMPLE 2 (PART A)

With GST (receipts)

Larry Fisher, owner of LG Fisher Air Conditioning, requires a cash budget to be prepared for the three months June, July and August 2010. The information given below consists of both actual and estimated receipts and payments for the budget period.

Receipts

	Actual			Expected		
	March	April	May	June	July	August
Cash sales			85 000	90 000	110 000	120 000
Credit sales	18 000	20 000	30 000	40 000	50 000	60 000

Terms for credit sales:

- 75% of credit sales are normally received in the month following sale.
- 20% of credit sales are collected in the second month following sale.
- 5% of credit sales are collected in the third month following sale.
- Interest of \$700 is received monthly on an investment of \$140 000. (No GST is applicable.)
- In August, Larry expects to sell office furniture for \$2 200.

Payments

	Actual	Estimated		
	May	June	July	August
Cash purchases	20 000	20 000	45 000	47 500
Credit purchases	80 000	65 000	90 000	92 000



- Cash purchases are paid for in the month in which they occur.
- Credit purchases are paid within 30 days from the last day of the month in which the purchases are made.
- Selling and distribution expenses of \$5 000 and general and administrative expenses of \$7 000 each month are expected. Depreciation of \$1 500 is included in the general and administrative expenses. Actual selling and distribution expenses for May were \$4 000 and actual administrative expenses for May were \$7 500, including depreciation of \$1 500.
- An interest on loan payment of \$3 000 is due in August (no GST is applicable). Larry intends to purchase a new vehicle worth \$55 000 in July.
- GST is reported monthly on an accrual basis.
- The cash balance at 1 June 2010 is \$15 000 Dr.

Step 1



Determine expected receipts of cash

a Receipts from cash sales

Cash sales require no calculation because cash is received immediately for a sale made for cash. In the case of LG Fisher Air Conditioning, the cash sales figures are provided and are recorded directly into the cash budget (see [14.9], page 709).

b Receipts from accounts receivable

A schedule of estimated receipts from accounts receivable is prepared to determine the cash received during the budget months [14.7].

[14.7]

Schedule of estimated receipts from accounts receivable

Month	Credit sales	June	July	August
March	18 000	18 000 x 5%		
April	20 000	20 000 x 20%	20 000 x 5%	
May	30 000	30 000 x 75%	30 000 x 20%	30 000 x 5%
June	40 000		40 000 x 75%	40 000 x 20%
July	50 000			50 000 x 75%
August	60 000			

From March and April sales, we are only interested in what will be received in the cash budget period.

The credit sales in August will not generate any cash for the cash budget period, so no calculation is required.

Schedule of estimated receipts from accounts receivable

Month	Credit sales	June	July	August
March	18 000	900		
April	20 000	4 000	1 000	
May	30 000	22 500	6 000	1 500
June	40 000		30 000	8 000
July	50 000			37 500
August	60 000			
		<u>\$27 400</u>	<u>\$37 000</u>	<u>\$47 000</u>

These amounts represent the cash expected to be received each month from accounts receivable. They can now be recorded in the cash budget (see [14.9], page 709).

c Receipts from GST

The amount that the business expects to *receive* from GST in each of the budget months is determined from the total amount of purchases of goods, services and assets from the previous month. This is because the firm will have paid GST to the suppliers for any goods or services purchased. The GST can be claimed back from

the ATO and is therefore 'GST reclaimable'. To calculate how much GST will be received each month, a simple schedule can be completed as shown in [14.8].

[14.8]

Statement of GST reclaimable						
Month	Purchases – inventory	Operating expenses	Asset purchases	June	July	August
May	100 000	10 000				June
June	85 000	10 500		(Purchases + operating expenses + asset purchases)/11		
July	135 000	10 500	55 000			
August	139 500	10 500				

Statement of GST reclaimable						
Month	Purchases – inventory	Operating expenses	Asset purchases	June	July	August
May	100 000	10 000		10 000		
June	85 000	10 500			8 682	
July	135 000	10 500	55 000			18 227
August	139 500	10 500		<u>\$10 000</u>	<u>\$8 682</u>	<u>\$18 227</u>

GST from August purchases is not receivable until September. Therefore, no GST amount for these purchases is shown in the budget.

The schedule calculates $\frac{1}{11}$ of total purchases for each month. No distinction is made between credit and cash purchases, because the firm reports on an accrual basis. In terms of GST, this means that the $\frac{1}{11}$ tax is deemed to have been paid at the time of purchase, not at the time of payment for the goods.

The amounts calculated are entered into the cash budget next to the line 'GST reclaimable'.

d Cash from other receipts

At this point, any other expected receipts of cash are recorded in the cash budget.

In each month, LG Fisher Air Conditioning is expecting to receive \$700 interest from an investment. This amount is recorded in the cash budget next to the line 'Interest revenue'.

In August, the expected proceeds from the sales of office furniture for \$2 200 are recorded in the cash budget next to the line 'Sale of office furniture'.

After totalling the receipts expected for the three months, the first stage of the cash budget is complete [14.9].

[14.9]

LG Fisher Air Conditioning Cash budget for June–August 2010 (extract)

	June	July	August
	\$	\$	\$
Expected receipts			
Sales – cash	90 000	110 000	120 000
Accounts receivable	27 400	37 000	47 000
GST reclaimable	10 000	8 682	18 227
Interest revenue	700	700	700
Sale of office furniture			2 200
Total expected receipts	<u>128 100</u>	<u>156 382</u>	<u>188 127</u>

Review & practice 3

- Why** is it necessary to use a combination of actual and estimated information to prepare a cash budget?
- How** does a business determine what percentage of accounts receivable will be received in a given time period?
- Explain **why** GST reclaimable is calculated using estimated purchases.
- J Vintner provides the following information on purchases. These amounts are GST-exclusive, and J Vintner reports GST monthly on an accrual basis.

Purchases		\$
Actual	December	60 000
Expected	January	35 000
	February	62 000

Prepare an estimate of GST reclaimable.

► Exercises 14.3 to 14.6, pages 725–6

EXAMPLE 2 (PART B)

With GST (payments)

With the first step of Larry's cash budget complete, it is now necessary to determine what cash payments will be made during the relevant period. Once receipts and payments are determined, the resulting cash balance can be calculated and the cash budget for LG Fisher Air Conditioning will be complete. Steps 2 and 3 are outlined below.

Step 2



a Payments for cash purchases

Determine expected payments of cash

The cash purchases for LG Fisher Air Conditioning require no calculation. They are recorded directly into the cash budget in the month in which they occur, next to the heading 'Purchases – cash' (see [14.12], page 712).

b Payments made for accounts payable

A schedule of estimated payments to accounts payable is prepared to determine the cash paid during the budget months [14.10].

[14.10]

Schedule of estimated payments to accounts payable				
Month	Credit purchases	June	July	August
	\$	\$	\$	\$
May	80 000	80 000		
June	65 000		65 000	
July	90 000			90 000
August	92 000			
		<u>\$80 000</u>	<u>\$65 000</u>	<u>\$90 000</u>

Purchases in August
will not be paid
until September. →

These amounts (June \$80 000, July \$65 000 and August \$90 000) are now recorded in the cash budget next to the line 'Accounts payable' (see [14.12], page 712).

c Payments for GST

The amount that the business will pay for GST is determined by the total amount of sales of goods and services made in the previous month. GST is collected and forwarded to the ATO in the following month and is recorded as 'GST liability'. A simple statement can be completed to determine the amount payable during the budget period [14.11].

[14.11]

Statement of GST liability						
Month	Sales of inventory	Other revenue	Asset sales	June	July	August
	\$	\$	\$	\$	\$	\$
May	115 000			(Sales + other revenue + asset sales)/11		
June	130 000					
July	160 000					
August	180 000		2 200			

Statement of GST liability						
Month	Sales of inventory	Other revenue	Asset sales	June	July	August
	\$	\$	\$	\$	\$	\$
May	115 000			10 455		
June	130 000				11 818	
July	160 000					14 545
August	180 000		2 200	<u>\$10 455</u>	<u>\$11 818</u>	<u>\$14 545</u>

The statement calculates $\frac{1}{11}$ of total revenues and asset sales for each month. The amounts calculated are entered into the cash budget next to the line 'GST liability' (see [14.12], page 712).

d Cash for other payments

LG Fisher Air Conditioning's other expected payments are now recorded. It is important at this stage to determine if any non-cash items have been incorporated in the other expense categories.

The general and administrative expenses include depreciation of \$1 500 per month. Depreciation is a non-cash item – that is, there is no actual cash paid for depreciation; it is a book entry only. Therefore, the amount for general and administrative expenses to be recorded in the cash budget will be \$5 500 (\$7 000 – \$1 500). This amount will be recorded each month next to the heading 'General and administrative expenses' (see [14.12]).

Selling and distribution expenses of \$5 000 will be recorded in each month next to the line 'Selling and distribution expenses' (see [14.12]).

The line 'Interest expense' will have \$3 000 recorded in the August column only, and in July, next to the line 'Purchase of vehicles', \$55 000 will be recorded.

The estimated payments section of the cash budget will appear as follows:



Refer to chapter 6.

[14.12]

LG Fisher Air Conditioning
Cash budget for June–August 2010 (extract)

	June \$	July \$	August \$
Expected payments			
Purchases – cash	20 000	45 000	47 500
Accounts payable	80 000	65 000	90 000
GST liability	10 455	11 818	14 545
General and administrative expenses	5 500	5 500	5 500
Selling and distribution expenses	5 000	5 000	5 000
Interest expense			3 000
Purchase of vehicles		55 000	
Total expected payments	120 955	187 318	165 545

Step 3



Calculate the cash balance

The resultant cash position for LG Fisher Air Conditioning is calculated in the same manner as in example 1. The result is shown in **[14.13]**.

[14.13]

LG Fisher Air Conditioning
Cash budget for June–August 2010 (extract)

	June \$	July \$	August \$
Cash balance (opening)	15 000	22 145	–8 791
Receipts <i>less</i> payments: surplus (shortage)	7 145	–30 936	22 582
Cash balance (closing)	\$22 145	\$–8 791	\$13 791

The cash budget for LG Fisher Air Conditioning is now complete and appears as shown in **[14.14]**.

[14.14]

LG Fisher Air Conditioning
Cash budget for June–August 2010

	June \$	July \$	August \$
Expected receipts			
Sales – cash	90 000	110 000	120 000
Accounts receivable	27 400	37 000	47 000
GST reclaimable	10 000	8 682	18 227
Interest revenue	700	700	700
Sale of office furniture			2 200
Total expected receipts	128 100	156 382	188 127
Expected payments			
Purchases – cash	20 000	45 000	47 500
Accounts payable	80 000	65 000	90 000
GST liability	10 455	11 818	14 545
General and administrative expenses	5 500	5 500	5 500
Selling and distribution expenses	5 000	5 000	5 000
Interest expense			3 000
Purchase of vehicles		55 000	
Total expected payments	120 955	187 318	165 545
Cash balance (opening)	15 000	22 145	–8 791
Receipts <i>less</i> payments: surplus (shortage)	7 145	–30 936	22 582
Cash balance (closing)	\$22 145	\$–8 791	\$13 791

Review & practice 4

- a What** is a cash shortage?
- b What** is a cash surplus?
- c Why** is depreciation not included in the cash budget?
- d Why** do most businesses pay their accounts payable in the month following purchase?
- e Explain why** GST liability is calculated using actual and estimated sales.
- f Prepare** an estimate of GST liability from the following information provided by R Cary. These sale amounts are GST-exclusive, and R Cary reports GST monthly on an accrual basis.

Sales		\$
Actual	April	57 000
Expected	May	43 000
	June	28 900

► Exercises 14.7 to 14.11, pages 726–8

Cash budgets and spreadsheeting

Learning objective 2 A spreadsheet is an electronic worksheet that allows the user to enter labels and values, and its use of formulas results in speedy and automatic calculations.

Using spreadsheets to prepare cash budgets has the advantage of eliminating errors once a template for the budget has been established. It also allows for ‘what if’ questions to be answered efficiently and accurately. Values can be manipulated by formulas to give different outcomes in a number of projected scenarios. As a result of the comparisons that can then be made between two or more situations, managers are better equipped to make appropriate business decisions on how to reach the objectives set by the business.

The design of the template is critical for the spreadsheet to be of maximum benefit to the business. The three stages in constructing the template/worksheet are:

- a** input /assumptions
- b** report
- c** documentation.

The *input/assumptions* section/sheet (or data/assumptions table) contains all the necessary data required for the report to be completed. In this section/sheet, it must be clear where the data is to be entered. It is also important for prompts or statements to be built into the design to ensure the accuracy of the output. This section/sheet does not contain formulas.

The *report* section/worksheet (or the output) should have the same layout as the desired final printout. It may contain hidden cells that are needed for the calculation of figures that do not need to be shown in the final report. Although data can be entered directly into the report section/sheet, doing so limits the flexibility of the spreadsheet. Therefore, the report should be prepared from the input/assumptions section/sheet.

Cells can be protected or locked to prevent data entry or to eliminate the accidental erasure of data from cells. This is particularly important when formulas are used, or where there are values and labels that identify important accounting information.

The *documentation* section/sheet is the last stage to be completed. It informs potential users of the worksheet's name and scope. Included in this section is the creator's name, date of establishment of the worksheet, the date and time of any adjustments made, and instructions for users of the worksheet. For simplicity, an index is provided showing the range and location of cell addresses for the various parts of the spreadsheet.

Planning the spreadsheet

Successful planning of a spreadsheet needs to be detailed and specific to encompass the requirements of the business. Just as the design of the accounting system commences with the end product (reports), so too should the design of the spreadsheet. From the report, individual stages can be planned and organised.

During spreadsheet design it is desirable to ensure that future alterations do not adversely affect other sections of the spreadsheet. Therefore, spreadsheets should be devised in such a way that adding and/or deleting columns and rows, and altering the heights and widths of columns and rows, do not adversely affect any other sections of the spreadsheet.

One possible spreadsheet design is to align the start and finish of each section with the screen layout of the particular spreadsheet program and/or the printed page. The layout in [14.15] is aligned using *Microsoft Excel* one screen across and one printed page down, and comprises the three stages required when constructing a well-designed spreadsheet.

[14.15]

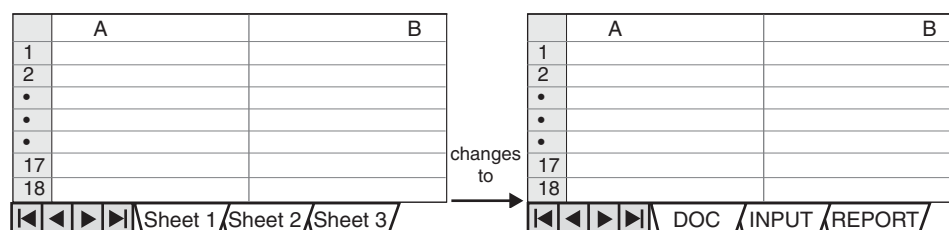
	A - I	J - R	S - AA
1			
2	DOCUMENTATION		
•	(Details the purpose		
•	of the spreadsheet		
•	and location of		
•	various sections)		
17			
18			
19	Stage 3		
20		INPUT/ ASSUMPTIONS	
•		(Data entry section)	
•			
•			
•			
35			
36			
37		Stage 1	
38			REPORT
•			(Final output for
•			users)
•			
53			
54			
55			Stage 2

Although the documentation section is the first area of the spreadsheet application, it is the last stage to be finalised.

Hyperlinks can also be included to move easily from one sheet to another.

An alternative spreadsheet design is to allocate each of these stages to a separate sheet within one worksheet. All sheets within the worksheet can be linked through the special paste function. Each sheet can be named to represent the various stages of the spreadsheet design, as illustrated in [14.16].

[14.16]

**EXAMPLE 3**

High Tech Ltd provides the following cash budget information:

Part A

- 1 Sales are normally 60% cash and 40% credit. The credit sales collection is generally 60% received in the month following the sale, 30% in the second month, and the remaining 10% in the third month following the sale.
Total sales for January, February and March were \$100 000, \$90 000 and \$110 000, respectively. Expected sales for April, May and June are \$140 000, \$130 000 and \$150 000, respectively.
- 2 Interest on investments of \$1 000, \$550 and \$400 should be received in April, May and June, respectively. (No GST is applicable.)
- 3 a Purchases are made on credit and are always paid in the month following the purchase.
b Purchases for each month are on average 50% of sales for that month.
- 4 Selling and distribution expenses are expected to be \$8 000, \$3 000 and \$4 000 for April, May and June, respectively. Actual selling and distribution expenses for March amounted to \$6 500.
- 5 General and administrative expenses are expected to be \$21 000, \$19 000 and \$24 000 for April, May and June, respectively. These amounts include depreciation of \$250 per month. Actual general and administrative expenses for March amounted to \$26 500.
- 6 It is anticipated that machinery costing \$55 000 will be purchased, with 60% being paid in April and the balance in May.
- 7 Salaries of \$10 000 are paid monthly. (No GST is applicable.)
- 8 A salary bonus equal to 2.5% of the total sales for the quarter is paid to staff in the first pay cheque at the commencement of the next quarter. (No GST is applicable.)
- 9 The bank account balance as at 1 April 2010 is \$11 500 Dr.
- 10 GST is remitted monthly on an accrual basis.
- 11 Assume all figures (where appropriate) are GST inclusive.

From the information above, you are required to complete a spreadsheet that includes:

- a input/assumptions section/sheet, report sheet and documentation sheet
- b cash budget for the quarter ending 30 June 2010, including:
 - i statement of expected receipts from accounts receivable and payable
 - ii statement of GST reclaimable
 - iii statement of GST liability
- c one printout each of:
 - i input/assumptions section/sheet
 - ii cash budget
 - iii worksheet showing all formulas
 - iv documentation sheet.

Part B

The business is considering an expansion program estimated to cost \$200 000. Management is looking to increase the selling price by 10% in the budget period to finance part of the expansion. Management will only go ahead with the expansion if the amount remaining to be borrowed is less than 50% of the total funds required.

You are required to complete one printout of the adjusted cash budget and comment on whether the expansion program will be affordable by the business.

An illustration of the cash budget worksheet for High Tech Ltd is shown in [14.17] to [14.21].

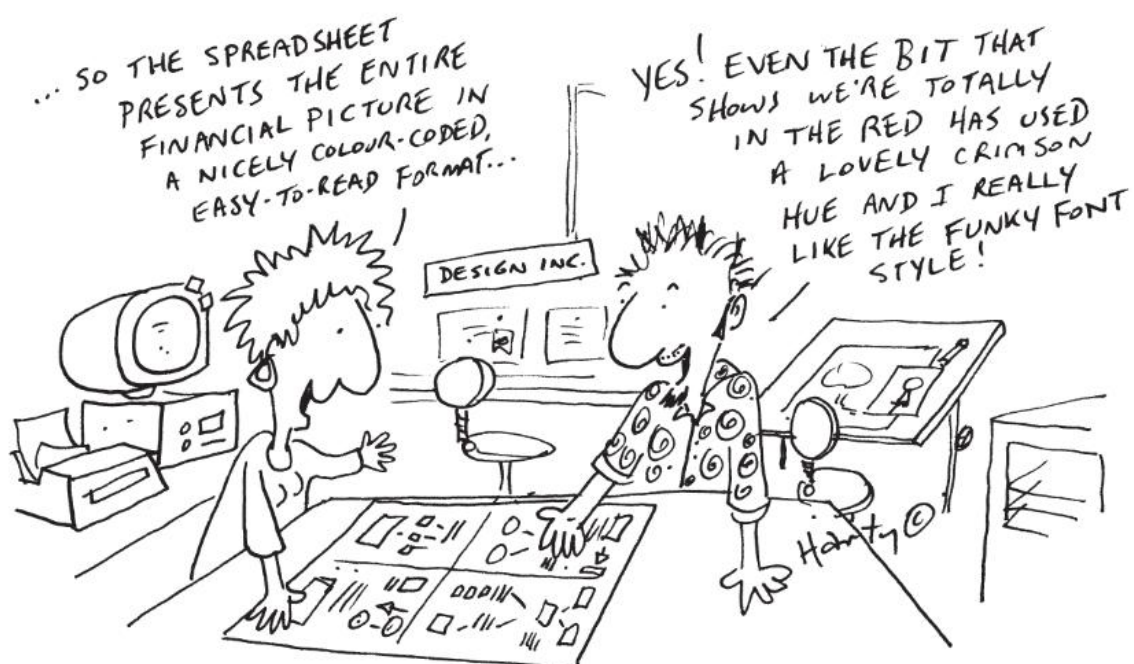


[14.17]

Part A Stage 1: Input/assumptions

	A	B	C	D	E	F	G
1	INPUT/ASSUMPTIONS FOR CASH BUDGET						
2							
3	Company name:	High Tech Ltd					
4	Quarter ending:	30-Jun-10					
5					Enter first month of budget		Enter last month of budget
6	Month	January	February	March	April	May	June
7	Receipts						
8	Sales	100000	90000	110000	140000	130000	150000
9	Interest on investments				1000	550	400
10	GST reclaimable						
11	Payments						
12	Purchases	% of sales					
13	Accounts payable	50%					
14	GST liability						
15	Salaries				10000	10000	10000
16	Salary bonus	2.50%					
17	Selling and distribution			6500	8000	3000	4000
18	General and administrative			26500	21000	19000	24000
19	Depreciation			250	250	250	250
20	Machinery	1st month	2nd month		55000		
21		60%	40%				
22	Sales details						
23	Cash	60%					
24	Accounts receivable	40%					
25	Credit sales collection %	1st month	2nd month	3rd month			
26		60%	30%	10%			
27							
28							
29					Enter balance below	Enter Dr/Cr below	
30	Cash balance (opening)				11500	Dr	

◀ ▶ 🔍 DOC INPUT REPORT



Part A Stage 2: Report

DOC / INPUT / REPORT

[14.19]

Part A Stage 3: Documentation

	A	B	C	D
1	Working template for cash budget		Index	
2	File name:	Budget High Tech Ltd	Scope of application	DOCA7-A8
3	Creator's name:	Zachary B	Instructions	DOCA11-A14
4	Establishment date:	1-Jan-10	Input/assumptions	Input A1-G30
5	Date and time of most recent adjustment	31/3/10 9:00	Report - Statements	Report A1 - G37
6			Report - Cash budget	Report A40 - E63
7	Scope of this application			
8	This application presents a cash budget for three months			
9				
10				
11	Instructions			
12	Access each section by using the spreadsheet tabs			
13	Enter data in the input/assumptions section			
14	Print the completed statements and cash budget in the report section.			

◀ ▶ 🔍 | DOC | INPUT | REPORT |

[14.20]

Part A Stage 2: Report (showing formulas)

	A	B	C	D	E	F	G
1	Statement of expected receipts from accounts receivable						
2		Credit sales	=Input!E6	=Input!F6	=Input!G6		
3	=Input!A6						
4	=Input!B6	=Input!B8*Input!\$B\$24	=\$B4*Input!\$D\$26				
5	=Input!C6	=Input!C8*Input!\$B\$24	=\$B5*Input!\$C\$26	=\$B5*Input!\$D\$26			
6	=Input!D6	=Input!D8*Input!\$B\$24	=\$B6*Input!\$B\$26	=\$B6*Input!\$C\$26	=\$B6*Input!\$D\$26		
7	=Input!E6	=Input!E8*Input!\$B\$24		=\$B7*Input!\$B\$26	=\$B7*Input!\$C\$26		
8	=Input!F6	=Input!F8*Input!\$B\$24			=\$B8*Input!\$B\$26		
9	=Input!G6	=Input!G8*Input!\$B\$24					
10			=SUM(C4:C9)	=SUM(D4:D9)	=SUM(E4:E9)		
11							
12	Statement of expected payments to accounts payable						
13		Credit purchases	=Input!E6	=Input!F6	=Input!G6		
14	=Input!A6						
15	=Input!D6	=Input!\$B\$13*Input!D8	=B15				
16	=Input!E6	=Input!\$B\$13*Input!E8		=B16			
17	=Input!F6	=Input!\$B\$13*Input!F8			=B17		
18	=Input!G6	=Input!\$B\$13*Input!G8					
19			=SUM(C15:C18)	=SUM(D15:D18)	=SUM(E15:E18)		
20							
21	Statement of GST reclaimable						
22		Purchases of inventories	Operating expenses	Purchases of assets	=Input!E6	=Input!F6	=Input!G6
23	=Input!A6						
24	=Input!D6	=Input!\$B\$13*Input!D8	=(Input!D17+Input!D18)-Input!D19		=SUM(B24:D24)/11		
25	=Input!E6	=Input!\$B\$13*Input!E8	=(Input!E17+Input!E18)-Input!E19	=Input!E20		=SUM(B25:D25)/11	
26	=Input!F6	=Input!\$B\$13*Input!F8	=(Input!F17+Input!F18)-Input!F19				=SUM(B35:D35)/11
27	=Input!G6	=Input!\$B\$13*Input!G8	=(Input!G17+Input!G18)-Input!G19				
28					=SUM(E24:E27)	=SUM(F24:F27)	=SUM(G24:G27)
29							
30	Statement of GST liability						
31		Sales of inventories	Other revenue	Sales of assets	=Input!E6	=Input!F6	=Input!G6
32	=Input!A6						
33	=Input!D6	=Input!D8			=SUM(B33:D33)/11		
34	=Input!E6	=Input!E8				=SUM(B34:D34)/11	
35	=Input!F6	=Input!F8					=SUM(B35:D35)/11
36	=Input!G6	=Input!G8					
37					=SUM(E33:E36)	=SUM(F33:F36)	=SUM(G33:G36)
38							
39							

continued ... ➔

	A	B	C	D	E	F	G
40	HIGH TECH LTD						
41	CASH BUDGET						
42	=Input!A4	=Input!B4					
43	Expected receipts		=Input!E6	=Input!F6	=Input!G6		
44	=Input!A8	=Input!A23	=Input!\$B\$23*Input!E8	=Input!\$B\$23*Input!F8	=Input!\$B\$23*Input!G8		
45		=Input!A24	=C10	=D10	=E10		
46	=Input!A9		=Input!E9	=Input!F9	=Input!G9		
47	=Input!A10		=E28	=F28	=G28		
48							
49	Total expected receipts		=SUM(C44:C48)	=SUM(D44:D48)	=SUM(E44:E48)		
50	Expected payments						
51	=Input!A12	=Input!A13	=C19	=D19	=E19		
52	=Input!A14		=E37	=F37	=G37		
53	=Input!A15		=Input!E15	=Input!F15	=Input!G15		
54	=Input!A16		=Input!B16*SUM(Input!B8:D8)				
55	=Input!A17		=Input!E17	=Input!F17	=Input!G17		
56	=Input!A18		=Input!E18-Input!E19	=Input!F18-Input!F19	=Input!G18-Input!G19		
57	=Input!A20		=Input!B21*Input!\$E\$20	=Input!C21*Input!\$E\$20			
58							
59	Total expected payments		=SUM(C51:C58)	=SUM(D51:D58)	=SUM(E51:E58)		
60							
61	=Input!A30		=Input!E30	=C63	=D63		
62	Receipts less payments: surplus (-shortage)=C49-C59			=D49-D59	=E49-E59		
63	Cash balance (closing)		=SUM(C61:C62)	=SUM(D61:D62)	=SUM(E61:E62)		

[14.21]

Part B: Report

	A	B	C	D	E	F	G
1	Statement of expected receipts from accounts receivable						
2		Credit sales	April	May	June		
3	Month						
4	January	40000	4000				
5	February	36000	10800	3600			
6	March	44000	22000	13200	4400		
7	April	64400		32200	19320		
8	May	59800			29900		
9	June	69000					
10			36800	49000	53620		
11							
12	Statement of expected payments to accounts payable						
13		Credit purchases	April	May	June		
14	Month						
15	March	55000	55000				
16	April	70000		70000			
17	May	65000			65000		
18	June	75000					
19			55000	70000	65000		
20							
21	Statement of GST reclaimable						
22		Purchases of inventories	Operating expenses	Purchases of assets	April	May	June
23	Month						
24	March	55000	32750		7977		
25	April	70000	28750	55000		13977	
26	May	65000	21750				7886
27	June	75000	27750				
28					7977	13977	7886
29							
30	Statement of GST liability						
31		Sales of inventories	Other revenue	Sales of assets	April	May	June
32	Month						
33	March	110000			10000		
34	April	161000				14636	
35	May	149500					13591
36	June	172500					
37					10000	14636	13591
38							

continued ...

	A	B	C	D	E	F	G
39							
40	HIGH TECH LTD						
41	CASH BUDGET						
42	Quarter ending:	30-Jun-10					
43	Expected receipts		April	May	June		
44	Sales	Cash	96600	89700	103500		
45		Accounts receivable	36800	49000	53620		
46	Interest on investments		1000	550	400		
47	GST reclaimable		7977	13977	7886		
48							
49	Total expected receipts		142377	153227	165406		
50	Expected payments						
51	Purchases	Accounts payable	55000	70000	65000		
52	GST liability		10000	14636	13591		
53	Salaries		10000	10000	10000		
54	Salary bonus		7500				
55	Selling and distribution		8000	3000	4000		
56	General and administrative		20750	18750	23750		
57	Machinery		33000	22000			
58							
59	Total expected payments		144250	138386	116341		
60							
61	Cash balance (opening)		11500	9627	24468		
62	Receipts less payments: surplus (-shortage)		-1873	14841	49065		
63	Cash balance (closing)		9627	24468	73534		

The business has not met the 50% funding requirement; therefore, the expansion cannot go ahead.

Review & practice 5

From the information provided for LG Fisher Air Conditioning in example 2 on pages 707–8, prepare:

- the input/assumption sheet
- a cash budget
- a spreadsheet showing all formulas.

► Exercises 14.12 to 14.16, pages 728–31

Analysing cash budgets

Learning objective 3

The activities of a business are assisted by cash budgeting. The aims of cash budgets are to:

- plan
- control
- analyse
- evaluate.

These aims allow managers to estimate the closing cash balance and highlight possible cash reserves or shortages where investment or borrowing may be necessary. Table [14.22] outlines the aims and advantages of cash budgets.

[14.22]

Aims	Advantage
Plan	<ol style="list-style-type: none"> 1 Planning allows managers in consultation with relevant personnel to set short- and long-term objectives. The input of personnel who are dealing with the daily activities of the business is of vital importance to the success of the budget. 2 Strategies to achieve the desired objectives can be formulated. 3 Objectives are expressed in quantitative terms in the budget.
Analyse and control	<p>The analysis of a cash budget is an important management tool and is used to control costs in the following ways:</p> <ol style="list-style-type: none"> 1 Cash commitments must be met when they are due. A cash budget indicates when cash is required for specific commitments such as accounts payable, payroll and interest on loans. A favourable reputation depends on the business's ability to pay its debts on time. 2 The schedule of expected receipts from accounts receivable allows managers to analyse the receipts of cash from credit sales. If accounts receivable are taking too long to pay, introducing discounts could encourage earlier receipt of the debt, or debt collection procedures may have to be introduced or tightened. 3 Businesses that are seasonal in nature earn the majority of their income in particular months of the year and it is important for managers to control spending so that payments can be met on demand. For example, ski hire outlets and water slide parks earn their revenue at different times of the year, yet expenditure for new equipment, maintenance and so on may fall due in the off-season period. 4 Surplus cash should be invested wisely in order to earn interest. Funds lying idle in a cheque account indicate a lost opportunity to increase the income of the business. 5 Cash shortages indicate periods when the business needs to arrange an overdraft or loan through a financial institution. If the business knows in advance when this situation is likely to occur, the best loan arrangements with a lower rate of interest could be organised. The budget document could be used as evidence to support loan applications. It could also show the business's ability to repay the debt over time.
Evaluate	<p>The performance of the business needs careful evaluation if the budget is to be a worthwhile internal control mechanism.</p> <ol style="list-style-type: none"> 1 The difference between budgeted and actual amounts is called the variance, which can be expressed as a dollar amount or a percentage. The variance figure highlights the discrepancies between budgeted and actual amounts and consequently evaluates the overall effectiveness of the business's objectives. 2 Variance analysis allows managers to decide on the areas where future improvements are necessary. 3 Once the improvements are recognised, recommended action plans can be written and allocated to appropriate personnel for implementation.

Variance analysis

Performance analysis is an integral component of cash budgeting and involves variance analysis between expected and actual events. A comparative report – receipts and payments – is prepared at set intervals throughout the year and assists in establishing effective controls such as:

- *accountability* for performance of the activities of the business
- *evaluation* of each of the activities
- *identification* of the causes of variances
- *implementation* of action necessary to rectify any undesirable trends.

Figure [14.23] shows a monthly performance analysis for LG Fisher in a comparative report.

[14.23]

LG Fisher Air Conditioning
Comparative report of receipts and payments
for June 2010

Variances are described as 'favourable' or 'unfavourable'.

Payments that increase are described as *unfavourable* variances, while receipts that increase are called *favourable* variances.

	Budget \$	Actual \$	Variance \$	Analyse
Expected receipts				
Sales – cash	90 000	78 000	–13.33	Yes
Accounts receivable	27 400	27 500	0.36	
GST reclaimable	10 000	9 800	–2.00	
Interest revenue	700	700	0.00	
Sale of office furniture	0	0		
Total expected receipts	128 100	116 000	–9.45	
Expected payments				
Purchases – cash	20 000	23 000	15.00	Yes
Accounts payable	80 000	68 500	–14.38	Yes
GST liability	10 455	11 800	12.87	
General and administrative expenses	5 500	4 025	–26.82	Yes
Selling and distribution expenses	5 000	5 200	4.00	
Interest expense	0	0		
Purchase of vehicles	0	0		
Total expected payments	\$120 955	\$112 525	–6.97	

A variance of 5%, or a nominated dollar amount, or a combination of a percentage and dollar amount between the budgeted and actual figures, is usually acceptable to businesses. Items over the accepted variance indicate that an investigation should be undertaken analysing that particular activity.

Of significance in [14.23] are the increases in cash purchases (unfavourable variance), the decreases shown in cash sales (unfavourable variance), and the general and administrative expenses (favourable variance). Any information available that explains the nature of the variances should be attached as a note to the report.

Writing the report

Learning objective 3

The final stage in preparing the cash budget for any business is to prepare a written explanation of the analysis and interpretation that has been conducted, and to outline any recommendations for improvement. As discussed in chapter 9, there are many methods of presenting this written explanation, such as memoranda, formal reports and informal reports. An informal report is the most common format used for analysing and interpreting a cash budget. An informal report contains the following:

- date
- heading
- introduction
- summary (optional)
- body – with subheadings
- conclusion
- recommendations
- signature and position of writer.

Remember that the aims of cash budgeting are to plan, analyse, control and evaluate. Analysis takes the form of examining each of the various elements of the cash budget, such as expected receipts, expected payments and the anticipated cash balance. Interpretation of the data will lead to recommendations to improve the overall cash position of the business if warranted.

Questions that should be considered as part of the analysis of a cash budget are:

- Do receipts indicate a seasonal business?
- Are sales predominantly cash or credit?
- Are credit sales increasing or decreasing?
- Are inventories purchased for cash or on credit?
- Are inventory purchases in line with projected cash sales?
- Are credit facilities of suppliers being utilised?
- Can unavoidable commitments be met (such as wages and GST payable) with ease throughout the budget period?
- Are any expected payments abnormally high, and can this be explained or is an error indicated?
- Can capital purchases be met from the cash provided during the period, or should an alternative payment method (such as staggered payments) be negotiated?
- Is a bank overdraft necessary at any stage to overcome any shortfall?
- Does the budget indicate period/s where a large surplus of cash is available for investing?

The schedule of expected receipts from accounts receivable should also be analysed and the following question considered:

- Are debtors taking too long to pay their debts, and could this have an impact on the cash flow of the business?

EXAMPLE 4

An analysis and interpretation has been conducted on the schedules and cash budget prepared for LG Fisher Air Conditioning in example 2 on pages 707–12.

1 May 2010 (date on which report is being written)

Report to LG Fisher Air Conditioning Re cash budget analysis, June to August 2010

After examining the business's cash budget and estimated schedules for June to August 2010, the following comments and recommendations are put forward for consideration:

Expected receipts

Sales

The total sales are expected to increase by 27.8% over the budget period with over 66% of sales in cash. This dominance of cash sales should be encouraged and increased to further enhance the overall cash inflow for the business.

Accounts receivable

The cash inflow from credit sales is expected to extend over 90 days with 75% of the sales received in the first month, 20% in the second month, and 5% in the third month following. This is of concern and needs to be investigated, as the poor cash flow from accounts receivable is affecting the business's ability to meet its own commitments or to provide for possible expansion in the future. The business needs to tighten its credit policy to reduce the term taken to receive payment from accounts receivable.

Expected payments

Overall, the projected cash outflow for purchases is budgeted to increase by 39.6%, with credit purchases dominating the transactions. Whilst an increase in purchases is to be expected given the expected increase in sales, the increase in purchases is not proportionate to the expected increase in sales and a review of the purchasing policy is warranted.

Also of concern is the forecasted 100% increase in cash purchases over the budgeted period. The business should endeavour to take advantage of suppliers' credit where possible and restrict cash purchases to a minimum. This will give the business an opportunity to receive the cash before the payment is required.



Other payments

Selling and distribution expenses, and general and administrative expenses are expected to be maintained at their current level for the quarter. However, the proposed purchase of a new motor vehicle in July will have a large impact on the closing cash balance for that month, creating a negative cash balance. Other payment options should be investigated, such as staggering payment over a number of months.

Cash balance

The cash budget shows LG Fisher Air Conditioning ending the quarter in a positive cash flow position, despite the negative projected balance for August.

Conclusion

From the cash budget, it can be concluded that the business appears to be in a satisfactory financial position as long as projected increases in sales actually happen. The purchase of the vehicle in July is not a good decision.

Recommendations

Areas and questions that should be addressed are:

- A review of the credit policy is recommended to consider methods to improve the collection rates from accounts receivable.
- Review the purchasing policy with a view to reducing cash and credit purchases and to determine whether the proposed levels of inventory are necessary. Reduce cash purchases and take advantage of discounts offered on credit purchases.
- Stagger the payments for the vehicle over an extended period of time. If the purchase of the motor vehicle goes ahead unchanged, it will be necessary to organise a bank overdraft or short-term loan to cover the increased expected expenditure.

A Student
Accountant

► Exercises 14.17 to 14.28, pages 731–2

Viability versus profitability

In any economic climate, a business needs to examine not only its profitability but also its viability in order to evaluate its financial position.

The cash budget is a management tool that indicates how viable a business is from the perspective of meeting its future commitments from its available and projected cash funds. The income statement, balance sheet and cash flow statement concentrate on the profitability, financial position and movement of cash, which reveal details of past transactions.

Profitability alone does not indicate a business's ability to meet its cash commitments. Adequate profits can be shown but, without a satisfactory present and future cash position, there is the possibility of financial difficulty eventually leading to bankruptcy. Therefore, managers need four reports (income statement, balance sheet, cash flow statement and a cash budget) to assist them in making financial decisions.

A cash flow statement (an end-of-period report) must be distinguished from a 'cash flow projection', which is, in essence, a cash budget.



Understandings

- The preparation of budgets is an important management tool and can take many forms (e.g. sales budgets, capital expenditure).
- In order to maintain adequate cash to meet commitments, it is vital that a cash budget be prepared. The cash budget forecasts the estimated receipts, payments and cash position for a period of time.
- Businesses can be profitable but may still collapse because of lack of cash at certain points in time. Although a business may be making a profit (as evidenced by the income statement), this does not mean that it has ready cash to meet its debts.
- The cash budget will reveal any periods of time when there is excess cash or not enough cash. Hence, the business can take appropriate steps either to invest the excess cash wisely or to make provision to meet any deficiencies of cash.
- To maintain the viability of a business, the four important reports that must be completed are:
 - income statement
 - balance sheet
 - cash flow statement
 - cash budget.
- The income statement, balance sheet and cash flow statement reveal details of past transactions. The cash budget forecasts the future cash position at certain points in time.

► Exercise 14.29, page 732

Exercises

★ 14.1 Cash budgets

What is a cash budget?

★ 14.2 Cash budgets

Why should a cash budget be prepared?

★ 14.3 GST reclaimable

What is meant by the term 'GST reclaimable'?

★ 14.4 GST reclaimable

A Guirola reports GST on a monthly accrual basis. Prepare a statement of GST reclaimable for October to December from the following information about purchases (GST-exclusive):

	\$
September	16 000
October	28 000
November	33 000

★ 14.5 Schedule of estimated receipts from accounts receivable

Maggie Hijazi provides the following information on credit sales:

		\$
Actual	April	80 000
	May	90 000
	June	110 000
Expected	July	115 000
	August	105 000
	September	80 000

The trend for receipt of cash from accounts receivable is as follows:

- 75% settle their account in the month following sales
- 20% settle in the second month
- 5% settle in the third month.

Prepare a schedule of estimated receipts from accounts receivable for the three months commencing July.

★ 14.6 Schedule of estimated receipts from accounts receivable

From the following information, prepare a schedule of estimated receipts from accounts receivable for Patty Nguyen for March to June.

Actual and expected credit sales are:

	\$
November	120 000
December	135 000
January	75 000
February	95 000
March	80 000
April	100 000
May	110 000
June	135 000

- 55% of accounts receivable are received in the month following sales.
- 25% are collected in the second month.
- 15% are collected in the third month.
- 5% are collected in the fourth month.

★ 14.7 Statement of GST liability

A Pham reports GST on a monthly accrual basis. Prepare a statement of GST liability for October to December from the following sales information (GST-exclusive):

	\$
September	64 300
October	62 500
November	87 800

★★ 14.8 Cash budget

From the following information, prepare a cash budget for Wunsch Associates for July and August 2010:

- Accounts receivable usually settle their debts as follows:
80% in the month following sales
20% in the second month following sales.
- Actual credit sales for May and June were \$3 500 and \$7 000, respectively.
- Accounts payable are paid in the month following purchase.
- Expenses are paid in cash in the month in which they are incurred.
- Estimates for July and August include:

	Cash sales \$	Credit sales \$	Cash purchases \$	Credit purchases \$
July	6 000	3 000	2 500	4 000
August	9 000	4 000	3 750	2 500

- Actual cash sales for June were \$7 000.
- Selling and distribution expenses are expected to be \$500 and \$750 for July and August, respectively.
- Actual expenses for June were \$5 800.
- General and administrative expenses are expected to be \$600 and \$850 for July and August, respectively, and include depreciation of \$50 for each month.
- On 1 July, the balances of the following accounts are:
 - bank \$1 000 Dr
 - accounts payable \$5 000.
- GST is reported on a monthly accrual basis.
- Assume all figures given (where appropriate) are GST inclusive.

★★ 14.9 Cash budget

Your employer, J Summer, presents you with the following information and asks you to prepare a cash budget for the four months August to November 2010.

Summertime Pools buys and sells goods for cash and credit. All cash sales and purchases are recorded in the month in which the transaction took place. Some 75% of accounts receivable are usually settled in the first month after sales, 15% in the second month and 10% in the third month.

Accounts payable are paid within 30 days from the last day of the month in which the credit purchases were made.

The actual and expected sales and purchases are:

		Sales		Purchases	
		Cash	Credit	Cash	Credit
		\$	\$	\$	\$
Actual	May	20 000	70 000	10 500	33 000
	June	12 000	50 000	14 000	25 000
	July	10 000	30 000	16 000	20 000
Expected	August	18 000	56 000	22 000	30 000
	September	22 000	88 000	24 000	42 000
	October	33 000	110 000	21 000	54 000
	November	32 000	105 000	23 000	52 000

Other forecasted cash transactions include:

- interest to be received on investments at \$500 per month
- payment of new equipment in August \$32 000
- selling expenses of \$2 300 per month, which include \$250 for depreciation
- general and administrative expenses of \$3 500 per month
- cash purchase of new truck expected in November for \$75 000
- assume all figures given (where appropriate) are GST inclusive.
- GST is reported on a monthly accrual basis.
- the balance of the bank account at 1 August is \$18 000 Dr.

★★ 14.10 Cash budget

Weatherhog & Co. sell goods for cash and on credit. Some 60% of credit sales are normally received within the month following sales, 20% within the second month, 10% within the third month, and the remaining 10% within the fourth month.

Accounts receivable from past months were:

March	\$21 200	April	\$24 000
May	\$22 600	June	\$26 000

Expected sales for the next four months are:

	Cash	Credit
July	\$46 000	\$23 000
August	\$48 000	\$26 000
September	\$50 000	\$27 000
October	\$48 000	\$26 000

Rent of \$2 000 per month is expected to be received. All purchases are made on credit and paid within 30 days. Expected credit purchases for July, August, September and October are \$45 000, \$43 000, \$36 000 and \$40 000, respectively.

Actual cash sales for June were \$47 000.

Estimated selling and administrative expenses are: July \$17 000; August \$16 000; September \$18 000; and October \$20 000. Actual selling and administrative expenses for June were \$17 500. These figures include a \$1 500 depreciation expense for each month.

Cash drawings are anticipated at \$850 a month (no GST is applicable). In addition, it is estimated that computing equipment worth \$30 000 will be paid for in three equal monthly instalments commencing in July. A loan and interest payment of \$25 000 (in total) is forecast to be paid in both July and October (no GST is applicable).

Assume all figures given (where appropriate) are GST inclusive.

GST is reported on a monthly accrual basis.

The balances of the following accounts at 1 July are:

- bank \$6 200 Dr
- accounts payable \$34 500.

Prepare a cash budget for the four months ending October.

★★ 14.11 Cash budget

A Jaurigue presents you with the following information and asks you to prepare a cash budget for the months January to April.

- Some 60% of accounts receivable pay in the first month after credit sale, 30% pay in the second month and 10% pay in the third month. Accounts receivable for October, November and December are \$22 200, \$23 000 and \$21 500, respectively.
- Accounts payable are paid in the month after the purchases were made. Accounts payable for December total \$21 000.
- All other expenses are paid for in the month in which they are incurred.
- Selling expenses include a depreciation amount of \$200 each month.
- Cash drawings are anticipated at \$750 per month (no GST is applicable).
- A motor vehicle valued at \$25 000 is to be purchased in February. A deposit of \$15 000 is to be paid in February, with the balance equally split between March and April.
- A loan repayment of \$20 000 is expected to be paid in January (no GST is applicable).
- Sale of government bonds valued at \$46 000 is expected to be received in February (no GST is applicable).
- The balance of the bank account at 31 December was \$4 200 Cr.
- Assume all figures given (where appropriate) are GST inclusive.
- GST is reported on a monthly accrual basis.
- All the other information appears below.

Expected	Cash sales	Cash purchases	Credit sales	Credit purchases	Selling expenses	Administrative expenses
January	\$66 100	\$26 100	\$20 000	\$20 000	\$21 200	\$22 200
February	\$68 000	\$27 100	\$23 100	\$13 800	\$22 200	\$24 000
March	\$70 100	\$27 000	\$26 200	\$14 000	\$23 400	\$24 500
April	\$68 200	\$28 100	\$27 100	\$15 500	\$25 270	\$25 200

Figures for December are: cash sales \$69 000; cash purchases \$25 000; general and administrative expenses \$23 000; selling and distribution expenses \$24 000.

★★ 14.12 Cash budget

C Nguyen operates a distributorship and sells merchandise for cash only. From the following information, prepare a spreadsheet for the quarter ended 30 September, including:

- the documentation, input/assumptions and report sections
- a cash budget
- a spreadsheet showing all formulas.

The sales figures for July, August and September are:

	Unit price \$10.00 Quantity	Unit price \$17.00 Quantity	Unit price \$20.00 Quantity
July	952	875	430
August	1 010	917	485
September	1 115	950	564

Commission on sales is received in the same month as the sales occur and is calculated at 5% of total monthly sales.

Purchases are made for cash and credit. Cash purchases for July, August and September are expected to be \$8 550, \$9 430 and \$11 000, respectively. Credit purchases are paid in the month after purchase and are anticipated at \$18 240, \$20 100 and \$22 400 for July, August and September, respectively. For June, cash sales were 900 @ \$10, 850 @ \$17 and 460 @ \$20, and cash purchases were \$8 000.

In September, Nguyen expects to replace the motor vehicle with a new vehicle valued at \$32 000 using the present vehicle valued at \$8 000 as a trade-in. Payments are to be spread over two months commencing in September.

All operating expenses are paid in the month in which they are incurred and are calculated at 15% of total monthly sales.

A \$1 500 dividend from an investment that Nguyen holds is expected to be received in August (no GST is applicable).

Assume all figures given (where appropriate) are GST inclusive.

GST is reported on a monthly accrual basis.

At 30 June, the cash at bank balance was \$18 000 Dr and accounts payable was \$17 900.

★★★ 14.13 Cash budget

From the following information for C Kumar & Co., prepare a spreadsheet for the five months, February to June, including:

- the documentation, input/assumptions and report sections
- a cash budget
- a spreadsheet showing all formulas.

Some 70% of accounts receivable settle their debt in the first month after sales, with 25% being received in the second month after sales.

Accounts payable are settled in the month following the credit purchases.

Wages are \$20 000 (no GST is applicable) on a monthly basis, and non-residential rent is received from tenants at \$2 400 per month. The business expects to purchase land in March and pay a deposit of \$100 000 at that time, with a further payment of \$50 000 in June. Loan repayments will amount to \$6 000 per month for February and March, and \$15 000 for April (no GST is applicable), May and June. Lease payments for the current premises are \$8 900 per month. Office expenses are paid in the month in which they occur.

Assume all figures given (where appropriate) are GST inclusive.

GST is reported on a monthly accrual basis.

Other transactions are:

		Sales		Purchases		Office expenses	Commission received
		Cash	Credit	Cash	Credit		
		\$	\$	\$	\$	\$	\$
Actual	December	20 800	99 500	13 700	58 080	15 000	16 000
	January	23 600	101 400	14 500	60 300	20 000	20 000
Expected	February	25 700	103 000	15 800	63 400	16 000	22 000
	March	33 600	134 400	16 300	65 500	20 000	24 000
	April	35 900	143 600	16 500	66 300	24 000	24 000
	May	38 900	154 200	18 300	73 400	26 000	23 000
	June	38 100	152 500	17 300	69 200	27 000	25 000

Bank balance at 1 February is \$15 000 Cr.

★★ 14.14 Cash budget

From the following information for Mascini Enterprises, prepare a spreadsheet including:

- the documentation, input/assumptions and report sections
- a cash budget for the two months ending December
- a spreadsheet showing all formulas.

		Total sales
		\$
Actual	September	129 000
	October	134 000
Expected	November	140 000
	December	155 000

- Sales are normally 70% cash and 30% credit.
- Receipt of credit sales has been based on past experience of 85% of accounts receivable being received in the month following sales and 15% in the second month following sales.
- Purchases are always made on credit, and accounts payable are normally paid in the month following purchase. Purchases for each month are on average 50% of total sales for that month.
- Actual general expenses for October were \$12 000.

- General expenses are paid in the month in which the transaction occurred. Included in general expenses for each month is depreciation of \$300.

Expected		Wages	General expenses
		\$	\$
	November	10 000	13 500
	December	14 000	9 000

- The purchase of new equipment valued at \$15 000 is planned for December.
- Assume all figures given (where appropriate) are GST inclusive.
- GST is reported on a monthly accrual basis.
- There is a credit balance of \$2 000 in the bank account.

★ ★ ★ 14.15 Cash budget

From the following information for S Patrick, prepare a spreadsheet, including:

- the documentation, input/assumptions and report sections
- a cash budget for the three months, March to May
- a spreadsheet showing all formulas.

From past experience, accounts receivable usually pay as follows:

- 30% in the first month after sales
- 50% in the second month
- 20% in the third month.

Credit sales for December were \$300 000, and were expected to show an increase of 10% for each month thereafter.

Actual figures for February were: cash sales \$120 000; cash purchases \$85 000; selling expenses \$32 000.

Accounts payable are expected to be 30% of the total monthly credit sales and are paid in the month following purchase.

Other cash estimates for the budget period are:

	Cash sales	Cash purchases	Selling expenses	Wages	Rates	Interest revenue
	\$	\$	\$	\$	\$	\$
March	125 000	90 000	35 000	100 000		2 000
April	170 000	120 000	31 500	140 000	4 000	
May	210 000	136 000	37 000	120 000		

The selling expenses include a monthly amount of \$5 000 for depreciation.

New plant and equipment costing \$80 000 is to be spread over the budget period in the following manner: March 50%, April 30%, May 20%.

GST is reported on a monthly accrual basis.

The bank balance at 1 March is \$15 000 Dr.

★ ★ ★ 14.16 Cash budget spreadsheet

You have recently been employed as the accountant by YRRR Traders Ltd. In the past, YRRR has prepared its cash budgets manually. You would like to spreadsheet the preparation of the quarterly cash budget. You decide to design a template that will allow you to prepare the budget for the next three months, January to March.

Information which needs to be considered is:

- 60% of credit sales are paid for in the month following sales
- 30% are paid for in the second month following sales
- the remaining 10% are paid for in the third month following sales.

All sales are made on credit. Total sales figures are as follows:

	\$
October	135 000
November	110 000
December	60 000
January	87 000
February	72 000
March	89 000

All purchases are made on credit and are paid for in the month following purchase. Estimated purchases are:

	\$
January	63 000
February	35 000
March	29 000

The wages expenses are:

- December \$3 600
- January \$3 700
- February \$2 950
- March \$4 000.

Administrative expenses for January, February and March are \$1 900, \$21 000 and \$1 600, respectively, and include \$175 depreciation for each month. Actual administrative expenses for December were \$1 800.

Commission revenue represents 8% of expected sales and is received by YRRR in the month following sale. The monthly cost of advertising is 5% of the total expected sales to be made in that month.

The business plans to purchase a new plant during January at a contract price of \$55 000. An initial payment of \$20 000 is to be paid in the month of purchase, followed by two equal monthly payments.

Assume all figures given (where appropriate) are GST inclusive.

GST is reported on a monthly accrual basis.

The account balances at the end of December are:

- Accounts payable \$26 500
- Bank \$31 750 (Cr)

You are required to print out:

- a** input/assumption area of the cash budget
- b** cash budget for January to March
- c** cash budget showing relevant formulas.

★★ 14.17 Closing cash balance



In your opinion, what is the significance of the following statement: 'The most important aspect of a cash budget is the closing cash balance.'

★★★ 14.18 Cash budget as a management tool



A cash budget is a management tool that is used to control cash by careful planning, control, analysis and evaluation. Give your opinion as to how effective a cash budget is in achieving these aims.

★ 14.19 Control



In the past, F Kirk has never considered preparing a budget for the business. As Kirk's accountant, write a memorandum dated 31 October 2010 explaining how budgeting will assist in improved management techniques.

★★ 14.20 Accounts receivable



L Major operates a business and wishes to review her credit practices. Accounts receivable normally take four months to pay, with 50% of credit sales being received in the first two months after sales. Major does not like to have business debts and pays her accounts payable within seven days of receiving invoices.

Identify the problems you believe need attention and recommend any necessary action to improve Major's credit policies.

★ 14.21 Variance analysis



State the purpose of variance analysis.

★★ 14.22 Cash budget – report memorandum



Refer to exercise 14.8 on page 726. You are employed by Wunsch Associates as a part-time accountant and on 20 June 2010 have been asked by Jennifer Wunsch to advise her by memorandum of the financial position of her business. In particular, she requires you to comment on the expected cash position.

★★ 14.23 Cash budget – report memorandum

Refer to exercise 14.9 on page 727. Prepare a memorandum on 20 July 2010 commenting on the financial position for the time period.

★★ 14.24 Cash budget – report memorandum

Refer to exercise 14.10 on page 727. Prepare a memorandum commenting on the financial position for the time period.

★★ 14.25 Cash budget – informal report

Refer to exercise 14.11 on page 728. Prepare an informal report commenting on the financial position for the time period.

★★ 14.26 Cash budget – informal report

Refer to exercise 14.12 on page 728. Prepare an informal report commenting on the financial position for the time period.

★★★ 14.27 Cash budget – informal report

Refer to exercise 14.13 on page 729. Prepare an informal report commenting on the financial position for the time period.

★★★ 14.28 Cash budget – informal report

Refer to exercise 14.14 on pages 729–30. Prepare an informal report commenting on the financial position for the time period.

★ 14.29 Viability and profitability

Explain the difference between viability and profitability.



Area of study:

Reporting and decision-making

AP

Accounting package:
the complete accounting
process

15

Chapter

AP

Accounting package: the complete accounting process

- A computerised accounting system
- Features of an accounting package
- Stages in the accounting process: manual versus computerised
- Differences between manual and computerised accounting processes
- Converting from a manual to a computerised system
- The complete accounting process for a sole trader
- Recording a range of business transactions using an accounting package
- Generating appropriate information in reports
- Interpretation of reports and decision-making

Accounting package: the complete accounting process

Already know

- The accounting process from source documents to end-of-period reports
- How to prepare accounts to end-of-period reports manually

Need to know

- Differences between manual and computer accounting processes
- Recording a variety of business transactions using an accounting package
- The complete accounting process for a sole trader, including GST, perpetual inventories, and the subsidiary ledger concept for accounts receivable and accounts payable
- Balance-day adjustments
- Generation of appropriate information through various types of reports
- Interpretation of reports generated by an accounting package
- Rollover to a new accounting period
- Reversing entries

Using this knowledge

- *Provides information for decision-making* through computerised accounting to make interim reports available at any time
- *Assists in discharging accountability* by providing different controls in a computerised system often accessed through password protection
- *Helps evaluate performance* through providing easy access to electronic data, which can be more easily collated over a longer period so trends can be picked up more readily. Targets can be set and monitored more regularly using a computerised system

ACCOUNTING VOCABULARY

Accounting package
Audit trails
Automatic posting
Back-ups

Batching
Computerised accounting
Session reports

Learning objectives

After completing this chapter, you should be able to:

- 1 understand the components of a computerised accounting system and its distinct advantages
- 2 consider the features of an accounting package
- 3 contrast the manual and computerised accounting processes: stages, differences and factors to consider when converting to a computerised accounting system

- 4 complete exercises that cover the complete accounting process for a sole trader, using commercial-standard accounting software and recording a variety of transactions, including GST, perpetual inventories, subsidiary ledgers and balance-day adjustments
- 5 perform the procedure at the end of the accounting period commonly referred to as 'rollover' into the next accounting period and reverse entries in the new accounting period
- 6 generate appropriate information through a variety of reports from the chosen computer accounting package
- 7 interpret a report generated by an accounting package.

A computerised accounting system

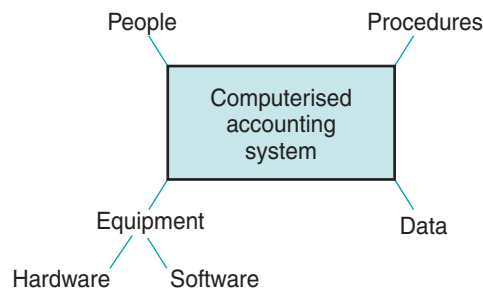
Learning objective 1

The need to account for GST has encouraged many small business owners to use accounting packages for recording their business transactions. An accounting package also helps in the regular completion of a Business Activity Statement (BAS), which is required by the ATO. Production of these reports involves the manipulation of business data. Generally, business data processing is performed by an accounting package or by an accounting module that is part of a large information system in a business.

In a computerised information system, data is processed with hardware that uses software programs. Information is usually generated in the form of reports. The accounting system is one part of the broader information system in the business. Financial data is processed using specialised computer accounting software. The reports are then analysed and interpreted in the same way as in a manual system.

A computerised accounting information system has four components, as shown in [15.1].

[15.1]



Outsourcing is the process of contracting external parties to provide services for a business, instead of the personnel performing these tasks internally.

People Staff or personnel are integral to the success of a computerised accounting system of any size. A knowledge of the discipline of accounting is essential for those responsible for interpreting and making decisions based on the reports generated by such a system. Training in system procedures is essential for data input staff to ensure the reliability of the information generated. Other essential personnel are technical support staff. In a small organisation, this role would be outsourced.

Equipment – hardware There are two distinct areas of hardware. The first is the network system that includes proxy servers and connections to the service provider for access to the Internet. The second is the end-user equipment that includes the hard drive, monitor, keyboard and printer. This equipment allows for the

application of the programs in use by specialist personnel in areas such as accounting, data entry and multimedia.

Equipment – software This refers to the computer program of instructions used to make the hardware function. A computerised accounting system would use a program known as an ‘accounting package’. There are a number of commercially available accounting packages. Alternatively, a business may have software written to cater specifically for the needs of its own industry. For example, *Mechanic* is accounting software designed to simplify the accounting records of businesses in the mechanical trade.

Larger firms that need more powerful software for their total information system generally purchase a ‘platform’ on which they can build various applications as required. For example, a system called *Total Service Management* is available for service businesses. Information from the various functions in this information system can be exported to the accounting package being used so that data input is not duplicated.

Procedures These are instructions and rules to guide users in how the system operates. Those using the system must know how to use it, and this is best achieved through written procedures that can be referenced later. Ideally, these procedures would also be readily accessible online.

Data This refers to facts and figures. When processed by people using equipment and procedures, the data that has been input is converted to information. Information is the basis for decision-making. Consider this example: in August, a business pays bonuses to its salespeople based on the level of sales achieved over a financial year. The data to be collected for each sale therefore must include the name of the salesperson. The equipment is programmed to determine the sales dollars attributable to each salesperson and to allocate a bonus based on the level of sales. Thus, \$500 000 worth of sales may attract a level 2 bonus of \$4 000, whereas \$1 000 000 worth of sales may attract a level 1 bonus of \$10 000. This information would then feed through the system to the payroll module and the employee would receive the bonus as an extra benefit appropriately taxed. Procedures would be in place to ensure that only valid data is collected by the system. This process maintains the integrity of the decisions made.

The use of a computerised accounting system has a number of distinct advantages over a manual system, including:

- speed of processing
- the ability to generate a variety of reports
- the ability to generate reports as and when required.

Features of an accounting package

Learning objective 2 One of the main reasons for using an accounting package is the ability to produce timely and accurate reports easily and at any time. These reports can be used to help evaluate performance and aid in decision-making.

An accounting package allows the user to input, process, store and output data and information. Accounting software has replaced business machines designed to automate the recording of business transactions. These machines performed the same process as today’s software, but they were cumbersome pieces of equipment. Accounting packages available now have the user-friendly features the public has come to expect of commercially produced software. These include things such as

menus, shortcuts for power users, extensive on-screen help, together with extensive back-up help available on the Internet.

While different accounting packages have various features, most share these common features:

Flexible chart of accounts An accounting package will generally have a flexible chart of accounts so that it can meet the needs of different businesses. It may also have pro-forma charts of accounts that the user can individualise for their own particular business.

Automatic posting An accounting package allows for automatic postings. This means that only one part of the entry needs to be entered into the program, because the program automatically makes the corresponding debit or credit entry for all transactions other than those made in the general journal.

[15.2]

Sales - New Item

INVOICE

Customer: Lala-Maharagh, Julia Terms: Net 30th after EOM ☒ Tax Inclusive

Ship to: Lala-Maharagh, Julia Invoice #: 05587775

Date: 16/03/2010

Customer PO #:

Ship	Backorder	Item Number	Description	Price	Disc%	Total	Job	Tax
100		1	Transport themed tee shirts	\$12.00		\$1,200.00		GST

Salesperson: Subtotal: \$1,200.00

Comment: Freight: \$26.00

Ship Via: Tax: \$111.45

Promised Date: Total Amount: \$1,226.00

Journal Memo: Sale; Lala-Maharagh, Julia Paid Today: \$0.00

Referral Source: Trade Show Payment Method: Cheque

Invoice Delivery Status: To be Printed Balance Due: \$1,226.00

This screen from MYOB records a credit sale [15.2]. (Note that nowhere on the screen are debit or credit mentioned.) Whenever a sale is entered, the automatic posting is a credit to the sales account. The customer is the element of the transaction that changes in each transaction and for which the details are recorded in the input screen for sales.

Additional modules/applications These include payroll/personnel management, non-current asset management and job costing. Apart from the basic accounting system package, these other modules can be purchased either with the package or separately at any time.

Security/audit trails/session reports/transaction logs Because processing is done internally, the program must incorporate an audit trail. This means that any data, or changes subsequently made to the data, must leave a track that can be retraced.

Protecting modules with passwords is a common form of security in accounting packages.

In the learning phase, audit trails/session reports showing all debits and credits entered are printed to verify transactions. In practice, however, this is not done because of the size of the documents that would need to be printed. Instead, if an item needs to be traced, then a batch number (recorded when the information is entered) is used to reprint the **batched** entries.



Batching refers to the process of entering data in batches rather than individually. For example, all the cash received from debtors over one day may be batched into the system at the same time. This means that one module is being accessed at a time.

Data exchange The portability of data into other computer software applications (word processing, spreadsheet, database) is a feature now common to computer accounting software. This export/import feature gives added flexibility to the user when reporting and when setting up a new system, allowing data already in existence to be imported into new software.

Customising of forms Accounting packages allow the user some flexibility in customising the business forms printed, such as tax invoices, statements and cheques. This allows different types of business to use generic accounting software, but to tailor the printed forms to the firm's individual requirements.

Stages in the accounting process: manual versus computerised

Learning objective 3

The generation, use and storage of source documents varies according to the type of accounting system and the environment in which the business operates. Whether a manual or computerised system is adopted, the information produced results from four stages in the accounting process. These stages are described in [15.3].

[15.3]

Manual accounting system	Stages in accounting	Computerised accounting system
Source documents (receipts, cheques, invoices and credit notes) provide the basis of the input. Various aids and devices such as time clocks, one-write systems, calculators, microfilm, microfiche, photocopiers and typewriters can be used to increase the efficiency of input.	1 Input is the entry of raw data (facts and figures).	Raw data is input into source documents, books/journals and ledger accounts through various means such as: <ul style="list-style-type: none"> • data entry at a keyboard or cash register • scanning devices or light pens • magnetic card readers • voice recognition devices. From small service stations to large department stores, computerised methods of data input are standard practice.
Processing begins by sorting, grouping and classifying data into journals; analysing their debit and credit components; calculating journal totals and posting the data to the ledger. For example, one credit sale of \$100 is raw data, but the addition of all the sales for the month allows the business to compare this figure with last month's total sales. The data then becomes information that is meaningful and useful.	2 Processing is the manipulation of raw data to produce meaningful information.	Processing is immediate and automatic once a batch of data is entered. The transactions are recorded and the balances of all affected accounts are updated. Invoices, credit notes, cheques and receipts are automatically generated. Online processing occurs when a user processes transactions to update current information. For example, when a business sells stock, inventory balances are immediately adjusted.
Data is stored in journals and ledgers. A chart of accounts is used to efficiently locate ledger accounts. Information can be accessed from the ledger accounts once the necessary processing and posting has been completed. Storage of journals and ledgers should be in secure equipment, safe from fire and theft.	3 Storage is the method by which data and information are kept for future reference.	Large amounts of data are stored on various media such as magnetic disk (hard or floppy), magnetic tape, or optical disks (CD-ROM). Computerised data must be backed up. At least one other copy of the data should be made to restore any lost data in case of computer failure or human error. Back-ups should be made regularly and stored at an alternative location in secure equipment safe from fire and theft. Some businesses duplicate their entire computerised systems in a separate location.



Manual accounting system	Stages in accounting	Computerised accounting system
<p>Information can be extracted from the ledger in the form of:</p> <ul style="list-style-type: none"> • trial balance to check the accuracy of the ledger • summary of all revenue and expense accounts in an income statement • summary of all asset, liability and owner's equity accounts in a balance sheet • summary of the business's accounts receivable and accounts payable in schedules • bank reconciliation statement reconciling the business's cash position • non-current asset registers • aged analysis of accounts receivable. 	<p>4 Output* is the end product of processing.</p>	<p>Data is processed as information is required. Computerised systems can produce financial information efficiently. For example, as data is processed, immediate updates of all reports can be obtained. Typical output includes:</p> <ul style="list-style-type: none"> • trial balance • income statement • balance sheet • ratio analysis of financial reports • accounts receivable statements • schedule of accounts receivable and accounts payable • aged analysis of accounts receivable and accounts payable balances • inventory quantity, valuation, price lists and reorder reports • all source documents.

* Various forms of output are fully covered throughout this text.

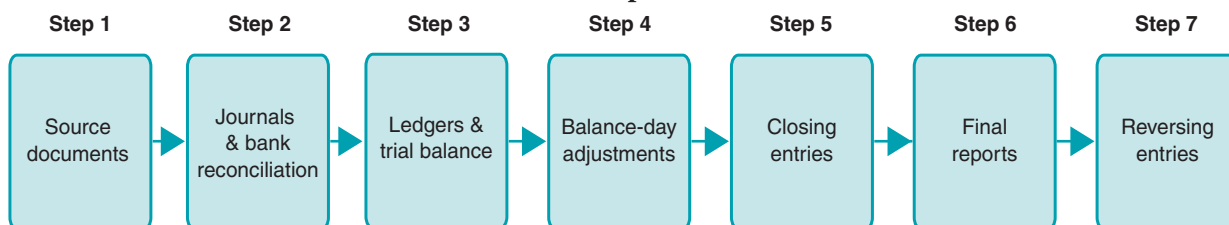


Differences between manual and computerised accounting processes

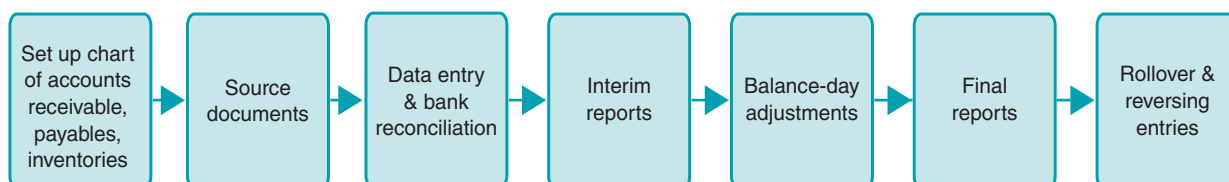
An overview of the manual and computerised accounting processes is provided in [15.4], and the difference described in [15.5].

[15.4]

Manual process



Computerised process



[15.5]

Feature	Difference between manual and computer accounting processes
Technological age	We have entered a new phase of history, a technological era, in which computer technology is accepted as part of everyday life. Although manual accounting is still used, and an understanding of the manual processes is essential in order to manipulate a computer accounting package and interpret the reports generated, it is accepted that processing of the raw data is more efficiently and effectively handled by computer than by manual methods.
Sequence of processing	The sequence of processing is different in manual and computerised accounting systems. Automatic posting of information in a computer system means that, in the computerised process shown in [15.4], steps 3 and 4 happen simultaneously.
Processing speed	Speed of processing is a major difference between a manual and a computer system. As data is entered into a computer accounting package, processing happens automatically and it is possible to generate updated reports at any time. In a manual system, reports are prepared at interim periods within the accounting period.
Control	<p>The use of an accounting package provides greater control over the operations of the business because timely reports can be produced. Because accounting reports provide valuable information on which decisions can be based, a computerised accounting system enables the timely, efficient and comprehensive analysis and interpretation of results. This improves control over the various facets of a business, especially non-current assets and current assets such as cash, inventories and accounts receivable.</p> <p>The generation, use and storage of source documents varies according to the type of accounting system and the environment in which the business operates.</p>
Inventories	With a computerised accounting system, the onerous task of updating inventory records as each purchase and sale is made is achieved quickly and efficiently using an accounting package. However, setting up a system for a trading business requires considerably more work than for a service business due to the need to itemise inventory items. Once the system is established, inventory levels can be monitored, itemised sales can be reported, and stock losses can be accounted for and monitored. Any discrepancies are highlighted when the computerised records are compared with a manual stocktake. This information can be used to plan new strategies to safeguard inventories.
Source documents	In a manual system, source documents are generally paper-based. In a computerised accounting system, they may be generated by computer and printed as hard copy. Alternatively, in an e-business environment, source documents may never become actual documents, instead remaining electronic records that feed into a computerised accounting and information system.
Backing up data	<p>Backing up data is the act of copying data files on to some other media (e.g. CD, floppy or tapes). It is an important task that must be performed regularly in a computerised accounting system. Power failures and system faults must be guarded against. A more insidious threat to a computerised information system is posed by computer viruses transferred globally via the Internet. A business that uses an information system would install an uninterruptible power supply, usually which gives the system half an hour to be closed down in an orderly manner in the event of a power failure. This eliminates major problems when a network loses power and 'crashes' and helps prevent data being lost or destroyed. Computers do not operate well when there are surges of power. Devices that stop spikes in the electrical supply are installed as an insurance against such power surges, because providing an even power supply eliminates many network problems. Backing up on to removable media is one method of minimising data loss when these other systems fail.</p>
Security	<p>Security in a computerised system is very different from that used in a manual system. A manual system's books of record can be kept locked and access physically restricted. Computer records are more vulnerable, so both internal and external security measures need to be put in place.</p> <p>Internal security in a computerised accounting system is generally maintained through a series of passwords. The holder of the master password allows access to different components of the system through sub-passwords allocated to particular users.</p> <p>External security is sometimes more difficult to achieve because hackers can infiltrate a computerised system and steal valuable data, or wreak havoc by deleting or altering the data already in the system. The risk may be heightened if features such as BPay are integrated into the system. Hackers delight in the challenge of accessing a system, and can cause havoc by releasing a virus. Numerous firewalls are essential to protect an information system. A secure environment safeguarded with encryption must be provided for Internet banking and other e-business activities to ensure security.</p>

A firewall is software that prevents unauthorised access to files.

See chapter 8 for more information on e-business.

Regardless of the system used (manual or computerised), the central focus of accounting is decision-making. Accounting measures financial data and communicates this information to interested people to allow informed decisions to be made. This is achieved by interpreting accurate and timely information, primarily from general-purpose financial reports as well as special-purpose financial reports such as budgets.

Converting from a manual to a computerised system

Learning objective 3

The introduction of the GST caused many businesses to change the methods they used to account for transactions involving supplies (sales) and acquisitions (purchases). Even though accounting for GST is not complex, the fact that regular BAS must be completed when remitting GST to the ATO means yet another report must be prepared. A computerised accounting system can simplify this reporting requirement.

When a new business is started, transactions may be recorded manually or in a computerised accounting system, depending on the expertise of the owner. Often a business is small enough when it begins for manual recording of transactions to suffice. As the business grows and the number of transactions increases, the recording of the transactions can still be handled manually, but access to timely reporting becomes difficult. At this point, the owner of the business is likely to consider converting to a computerised system to take advantage of information that can be provided in a timely manner. A business decision is based on weighing up the costs and benefits. These factors must be considered before a conversion to a computerised accounting system is undertaken.

Weighing up all the factors

In the past, the decision may have been whether or not to implement a computerised accounting system. In the post-modern era, the decision is about which computerised accounting system to choose. The choice will be between a commercially prepared generic system that can be adapted to any business, and a system especially designed for the business on a platform that is engineered to meet the needs of the individual business.

Design, analysis and evaluation of the proposed type of computerised accounting system should be undertaken, with careful consideration given to the costs and benefits. Initially hardware, and software need to be purchased, but ongoing operating costs will also need to be factored into the decision.

The following are also considerations:

- cost of updating the equipment and software over time
- cost of training employees or employing trained personnel
- number of personnel required to operate the system
- level of training required by the personnel who will be using the system
- speed at which transactions and reports are processed
- volume of data to be processed
- whether or not the software needs any modification to fit the requirements of the user
- length of conversion period
- number of interruptions to the normal business activities during the conversion process

- support offered from the supplier of the package to assist with the installation and initial operation period
- inbuilt security to ensure only authorised personnel have access to the data
- integration of the system with other hardware and software already in use
- cost of the system
- cost of future maintenance and upgrading
- cost of operating a dual system in the initial stages (if necessary).

The bottom line – a question of integrity

Whether using a manual or a computerised system, the bottom line is whether the data recorded and the information produced is accurate and therefore can be relied upon. Does the information have the fundamental attribute of reliability? This is a qualitative characteristic expected of financial information by the users of the financial reports.

Just because the accounting system produces figures that 'balance' does not mean that those figures are correct. The presentation of information can sometimes disguise a lack of integrity because the information is presented as a colourful spreadsheet with fancy graphs that 'look good', while the information can in fact be incorrect. Decision-making may be based on erroneous information. The controls present in the manual system must also be present in a computerised system together with other controls that must be implemented to ensure data integrity.

How can a business strive for integrity in its computerised financial system?

- 1 Regular maintenance of the computerised accounting system must be undertaken. Defunct accounts need to be archived, and any new accounts added need to be checked that they are appearing correctly in the reports.
- 2 Results of any other accounting modules must be compared with the general ledger to ensure accuracy. Often 'add-on' modules are purchased for inventories, purchasing assets and payroll.
- 3 The system must be monitored and this process logged. Daily integrity reports might be produced for a large system. Discrepancies must be followed up while users remember the circumstances. Problems are harder to trace after a week or a month.
- 4 Be familiar with the operation of the system and ensure disciplines and internal controls are in place so that all personnel using the system are trained to use it correctly, thus minimising errors.

Review & practice



- What** are the four components of a computerised accounting system?
- What** are the six features of a computerised accounting system?
- What** are the differences between the manual and computerised accounting processes?
- What** are some of the factors that need to be weighed up before converting to a computerised system?
- Why** would a business decide to convert from a manual to a computerised system?

The complete accounting process for a sole trader

Learning objective 4 *MYOB* and *QuickBooks* are two popular accounting packages available for SMEs (small to medium-sized enterprises). There are many others also available, such as *Peachtree Accounting*, Acclaim Software Ltd's *Cashbook Complete*, *Cashflow Manager*. The ATO also has a simple computerised accounting package, called *E-Record*, that allows a business to record its transactions in a computerised manner. This software is freely available and can be downloaded from the ATO site at <www.ato.gov.au> (search for E-Record).

When downloaded, the opening screen appears as shown in [15.6].

[15.6]

Australian Government
Australian Taxation Office

e-Record6
Worksheet Index

Business Name
Accounting Classroom Resources

Financial Year: From 2009 to 2010
To select year, enter the 'From' year and press TAB.

Buttons: Add Business, Select Business, Delete Business, Back-up year data, Restore backed-up data

Setup...	To start using e-Record, add your business details and enter the financial year above.
Reconciliation of Daily Sales	Record takings and payments from your cash register.
Cash Book	Record all your receipts and payments, and obtain summaries.
Worker Records...	Record Worker Payments and Withholding Where ABN Not Quoted.
Activity Statement...	Calculate the figures for your Activity Statement.
CashFlow	Project and monitor your cash position.
Tax Invoice (or Invoice)...	Prepare and print your own Tax Invoices.
Bank Reconciliation	Reconcile your Bank Account with your Cash Book.
Instalment Income	Calculate your Instalment Income.
Asset Register	For businesses using the Simplified Taxation System only.
Stock Log	For businesses using the Simplified GST Accounting Method only.

Version 6.0

Other commercially available software, such as *Solution 6*, *ACCPAC* and *Attaché Catapult*, have additional features. These include the ability to customise and manipulate reports to a greater extent than smaller packages and to handle larger volumes of transactions. This type of accounting software is more suited to the needs of larger firms. National or international businesses may incorporate their accounting information system into the business's overall management information system. Often software is tailored specially to meet the needs of such large corporations. A multinational company such as McDonald's, for example, uses accounting software that is specially designed for its needs, including its financial reporting needs.

The article in [15.7] compares and contrasts the two most popular accounting packages used by small to medium-sized enterprises in Australia in 2002.

[15.7]

Software shootout: QuickBooks Pro versus MYOB Premier 6

When it comes to recommending an accounting package for small business clients, the main contenders are QuickBooks and MYOB. David Neiger puts them to the test.

There was no argument from either Reckon or MYOB that MYOB is the most popular small business accounting package in Australia with a local customer base of around 350 000 business users compared to around 250 000 Quicken software users. Intuit, which produces the Quicken software for the world, is US-based and boasts a considerably larger international user base of around 3.5 million users compared to MYOB's 450 000 users. But is bigger necessarily better?

MYOB Australia is the local developer of MYOB and owns the source code and rights to MYOB software. As an Australian company, it's considerably smaller than the US-based Intuit with significantly less to spend on software development. However, MYOB's development spending is concentrated upon the Australian versions of MYOB whereas with Intuit 'the majority of development spending on QuickBooks in the US is for functionality that is available for QuickBooks Australia'. While MYOB is an Australian product, QBP is a localised version of a US product. I understand that Reckon does have complete flexibility to customise the QuickBooks code and can deal with local issues but ultimately does not own the source code ...

The packages

Both packages are high quality small business accounting packages that utilise double-entry accounting standards. They both perform a full range of accounting tasks and are GST-compliant.

Although Reckon claims to have the superior user interface, both packages are easy enough to use. MYOB's interface is clear and uncluttered but is different from common Windows packages such as Office. QBP uses a familiar Web browser interface that features various panes to provide users with a quick overview of important information (such as payables, overdue receivables, etc.). Unlike MYOB, QBP's browser interface allows the product to connect to online services such as online credit checks and business directories although there is a charge to use these services. QBP's interface also allows for the delivery of ads, encouraging users to subscribe to Quicken Advantage or purchase goods and services from selected providers.

QBP uses account names, rather than numbers, and makes extensive use of drag and drop technology to simplify tasks such as rearranging and consolidating the chart of accounts. Although MYOB can use account names, it is primarily account-number-based, which is fine for accountants but confusing for small business operators. When it comes to the banking area, QBP has a few nifty little features such as the ability to scroll backwards and forwards through registers (like a paper cheque book), the use of colour-coded forms and a small pop-up calculator. QBP also provides automatic updating of vendor and customer information when an operator changes details on an invoice, cheque or receipt, ensuring that the contacts database remains current. MYOB users scroll through the register in a list and can view individual transactions by clicking on a button but must intentionally choose to update contact details on a separate screen.

Where QBP excels is in its business decision and reporting tools which include a series of wizards that assist small businesses to assess key performance indicators such as profitability, debt to equity ratios and financial strength. As well as carrying out the analysis, QBP includes detailed information to help operators interpret the results and learn more about running their business. QBP also includes handy reference information about managing credit, receivables and depreciation as well as tax considerations when engaging employees. It also exports dynamic formula-based reports (which are closer to business models) to Excel to allow for further analysis.

MYOB lacks these business analysis features but includes in-built payroll, time costing/reporting and export filters to allow users to send data to their accountants in Solution 6, Teletax, C-Data and MYOB Accountants format. QBP only exports data to Solution 6 via the ADT utility as they assume that you (the accountant) will have your own copy of QBP.

MYOB's integrated payroll and time costing modules allow users to process payroll, record timesheets and generate invoices from timesheets without leaving MYOB. Although QBP includes Quicken Payroll and time recording software, they are quite clearly distinct packages that require users to import and export files in order to run payroll and use time costing. I found this a real turn-off as it was tedious and prone to error if you select the wrong file.

Unlike QBP, MYOB provides electronic payment files for Australian banks and can integrate with Australian online banking packages as well as handle multiple



currencies (important for Australian businesses dealing in Asia). Both packages are fully GST-compliant with little difference in how they handled GST, BAS reporting and generating BAS files.

The verdict

Bottom line – QBP may be slightly easier for operators to use and includes some nifty features and business

analysis tools; however, payroll and time costing is tedious to use. MYOB lacks the business analysis tools and Web-like interface but has integrated payroll, time costing, multiple currency support, integration with Australian banking packages and support for packages that accountants use in their practices.

*David Neiger is an IT consultant.
Source: Neiger, D 2002, Australian CPA, July.*

N.B. This article was correct in 2002 but not necessarily indicative of subsequent circumstances

Recording a range of business transactions using an accounting package

Transactions are entered into the package according to the type of transaction (sales, purchases, cash received or paid) as illustrated in [15.8]. The book/module will vary according to the particular program.

[15.8]

Manual accounting system			Computerised accounting system		
Transaction type	Journal	Description	Transaction type	Book/Module	Description
Cash	Cash receipts Cash payments	All cash receipts All cash payments	Cash	Bank	Cash received (not sales), cash paid out (not purchases)
Credit	Sales	All credit sales	Customers	Sales	All sales transactions Cash sales Credit sales Cash from accounts receivable Adjustments to cash or credit sales
	Purchases	All credit purchases			All purchase transactions Cash purchases Credit purchases Cash to accounts payable Adjustments to cash or credit purchases
Other	General	Any other journal transaction	Other	General journal	Any other journal transaction
			Inventory	Inventory	Record, monitor and adjust inventory items

Table [15.8] indicates how manual and computerised systems differ in the way they classify business transactions. Whereas the manual system concentrates on the difference between cash and credit transactions, this distinction is not important for a computerised system. The computerised system is focused on customers, suppliers and cash transactions.

To become familiar with an accounting package, use the exercises in the following pages. Exercises later in the chapter incorporate the complete accounting

process. Although a computerised system classifies transactions according to customers and suppliers, it is easier when learning computerised accounting to take a cash/credit approach that mirrors the manual process. The practice exercises omit details such as addresses and so on to facilitate learning.

Setting up a new business

Each accounting package will have a procedure for setting up the system in readiness for the transactions of a new business. Part of the process will involve the following:

- selecting a conversion date
- creating a chart of accounts.

Selecting a conversion date

The date on which the business converts to computerised records will be the conversion date. If the business has just begun, then the conversion date will be the same as the start date of the business.

If the business has been in existence for some time using manual records or a different computerised accounting package, then the date of conversion will be the date on which the business begins to use the new package. If this is the case, the records already in existence need to be recorded in the new accounting package. It is a good idea when using a new package to begin at the start of a new accounting period. This allows the balances in the recently prepared balance sheet to form the basis of the start-up entries in the accounting package.

It is quite feasible that two systems (manual and computerised) will need to be operated for a short time. Thus, while the new system is being trialled, the old system acts as a back-up. Once confident that the new system is bug-free, the business can stop recording transactions using the old system and make the full conversion to the new computerised system.

Creating a chart of accounts

Once the decision has been made to implement a computerised accounting system, a method of coding the ledger accounts is essential. Coding in a chart of accounts facilitates the recording of each transaction to the correct account. Each business either will have a chart of accounts in existence or, if it is a new business, will design a chart of accounts to suit its particular requirements.

Each accounting package will have a procedure for setting up the system in readiness for the transactions of the business. In order to come to grips with the computerised accounting system, it is wise to accept as many system defaults as possible, including the default chart of accounts for a service business. It is easier to begin with a service business, as the processes can be learned without accounting for inventories.

New accounts are entered as needed, but the way in which these accounts are grouped and classified is decided when the package is first installed. If the default chart of accounts is not utilised, the manual should be used to learn how to change the default chart of accounts or create a new chart of accounts in the set-up stage.

Cash transactions

Four types of cash transactions for a service industry will be addressed:

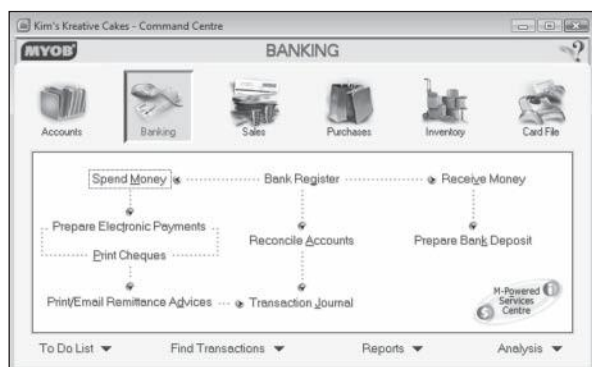
- cash receipt of capital (GST is not applicable)
- cash receipt of revenue

Unless indicated, assume GST is applicable and is included in the figures given.

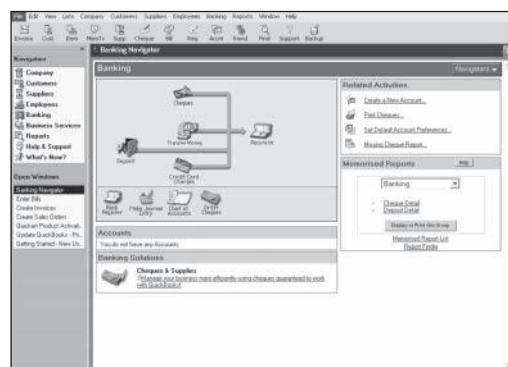
- cash payment of wages (GST is not applicable)
- cash payment of drawings (GST is not applicable).

The banking module in *MYOB* is used for these cash transactions [15.9a]. In *QuickBooks*, the banking and credit cards module is used [15.9b].

[15.9a]



[15.9b]



PRACTICE EXERCISE 1

Jonathon Treherne began business as a freelance events organiser on 1 July 2010. This is a service business. Using a data file created for this business in either *MYOB* or *QuickBooks*, enter the following transactions and print a balance sheet as at 31 July 2010.

2010

- July
- 1 Jonathon deposits \$10 000 cash as capital into a bank account set up in the name of the business. (No GST is applicable.)
 - 14 Jonathon received commission \$440 for allowing another company to advertise on his website.
 - 24 Paid \$500 as wages for a newly employed assistant, B Kendall. (No GST is applicable.)
 - 28 Jonathon withdrew cash of \$600 for his own use. (No GST is applicable.)

► Exercise 15.9, page 765

Correction of errors (simple)

Accounting packages are based on the double-entry principle. Some packages will not allow the user to continue unless the entries in the books are balanced. Other packages will detect that an unbalanced entry has occurred and will signal this to the user but allow further entries to be made. Some packages have a 'suspense' account in which the outstanding value may be posted in order to temporarily balance the books. Other packages allow an unbalanced entry to proceed throughout the system, but this is indicated in a summary of entries when an audit trail is produced. Whatever the method used by the accounting package, the onus is on the user to find out why the imbalance has occurred and to make any missing entries to correct the books. A further unbalanced journal entry to bring the books back into balance or an entry to transfer the suspense account amount to its correct account may be required. Alternatively, the entry that is out of balance may be reversed.

Errors can occur inadvertently as data is entered. The computerised accounting system used will have methods of correcting errors if it is realised that data is incorrect as it is entered. If the data file has already been updated, another

entry will need to be recorded to counter (reverse) the incorrect entry. Allowing data to be changed only by making another entry is a security feature in a computerised accounting system. This allows all entries to be traced by leaving a trail. When the books are audited, changed data can therefore be investigated if necessary.

One method of correcting an error is to reverse the entry by making another entry in the journal in which the original entry was made. Some systems allow a negative amount to be entered. Each accounting package recommends an error correction procedure, which is detailed in the manual of the computer accounting package. For example, an incorrect receipt could be corrected by entering a negative receipt. Alternatively, a general journal entry would achieve the same result. An added advantage of correcting errors in the general journal is that a full explanation can be made as a 'memo'.

PRACTICE EXERCISE 2

Using Jonathon Treherne's records from practice exercise 1, correct the following incorrect entries. (GST is not applicable to these transactions.)

2010

July 5 It was realised that the deposit of capital on 1 July was incorrectly entered. It should have been recorded as \$100 000 and not \$10 000 cash.

31 Drawings of \$600 recorded on 28 July were incorrect. The correct figure was \$6 000.

Reprint the balance sheet as at 31 July 2010.

Customer transactions (service industry)

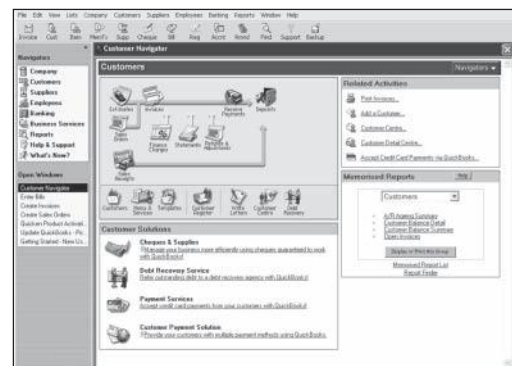
A service enterprise must record the earning of revenue from services performed. It does this through the sales book using accounts named 'service type', 'service fees' and so on. The sales book/module facilitates the entry of *all* transactions regarding customers irrespective of how the customer is to be paid (cash or credit).

The sales book in *MYOB* is used for these customer transactions [15.10a]. In *QuickBooks*, the sales and customers book is selected [15.10b].

[15.10a]



[15.10b]



Cash and credit sales are both recorded through the sales book. In *MYOB*, to distinguish between a cash and credit sale entry, the amount received for a cash sale is recorded in the 'paid today' box in the sales invoice. In *QuickBooks*, a distinct choice of either creating an invoice (credit sale) or entering a cash sale is made from the sales and customers book.

PRACTICE EXERCISE 3

Julian Wruck began business as a computer consultant on 1 July 2010. This is a service business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print an income statement as at 31 July 2010.

2010

- July 1 Julian deposited \$20 000 cash as capital into a bank account to begin his business. (No GST is applicable.)
- 5 Julian assisted a client and charged \$200 for his services. The client paid immediately in cash.
- 9 Julian billed a client, Mary-Lou Watkins, \$600 for services rendered.
- 18 Mary-Lou Watkins remitted a cheque for \$600 in full payment of her account.
- 20 Julian billed a client, Matthew Martens, \$800 for services to his computer.
- 22 Julian billed Maisy Graham \$100. Terms are net 30.

► Exercise 15.10, page 766

Further customer transactions (service industry)

The final customer transaction to be considered is:

- bad debts.

Bad debts

From time to time, credit is extended to a customer who cannot later pay the debt. Although the owner would seek to recover the debt in different ways over a period of time (by phone calls, letters, debt collectors and legal action), the business may eventually decide to write off the debt as bad. The debt of the customer would be erased and the business would record the amount as a bad debts expense.

Because GST will no longer be collected from this sale, an adjusting entry to the GST also needs to be made.

PRACTICE EXERCISE 4

On 1 July 2010, Maria Russo began business as specialist dance teacher, teaching primary school students to dance. The business is called Dance Fever. It is a service business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print an income statement and a balance sheet as at 31 July 2010.

2010

- July 1 Maria deposited \$20 000 cash as capital into a bank account to begin the business. (No GST is applicable.)
- 2 Invoices for dance classes are prepared for the following schools.

Kookaburra Valley International School	200 students @ \$10.00 each
St Anthony's Alexandra Hills	600 students @ \$10.00 each
Guardian Angels School Wynnum	300 students @ \$10.00 each
- 8 Received a cheque from Guardian Angels School Wynnum in payment of the account.
- 25 St Anthony's Alexandra Hills sent a cheque in full payment.
- 31 Received notification that the Kookaburra Valley International School had gone into receivership and was likely to be declared bankrupt. Therefore, it cannot pay its debts. Maria decided to write off the amount owing as a bad debt.

► Exercise 15.11, page 766

Supplier transactions (service industry)

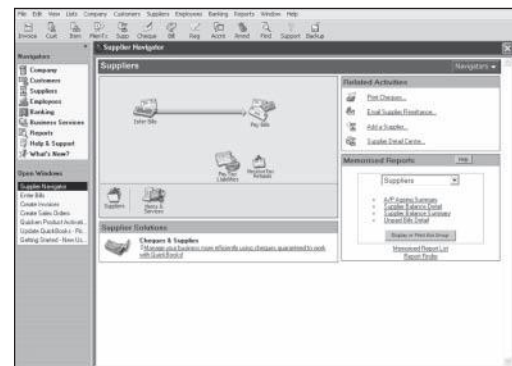
When items are purchased by a business, GST is paid on the purchase and then reclaimed from the ATO. In order to do this, the business must hold a tax invoice that by law must include the Australian Business Number (ABN) of the supplier. Unless this documentation is held, GST receivable cannot be reclaimed. When recording purchase transactions, the ABN for the supplier must be recorded. The format of the ABN is xx xxxx xxx xxx. (A fictitious number can be used in these exercises.)

The purchases module in *MYOB* is used for these supplier transactions [15.11a]. In *QuickBooks*, the purchases and suppliers module is selected [15.11b].

[15.11a]



[15.11b]



PRACTICE EXERCISE 5

Petrea King began her business as a dental technician on 1 July 2010. This is a service business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print a balance sheet as at 31 July 2010.

2010

- July 1 Petrea deposited \$50 000 cash as capital into a bank account to begin her business. (No GST is applicable.)
- 5 Petrea received word that the \$500 000 loan for equipment was approved by Bank of Queensland and that the loan funds were deposited in her bank account. (No GST is applicable.)
- 8 \$500 000 worth of specialist dental equipment is purchased from Qld Dental.
- 12 Received dental equipment from Qld Dental. Cheque 1 for \$475 000 was written on this date.
- 14 Petrea purchased supplies for the surgery on credit from R Toohey & Co. for \$4 800.
- 15 Petrea wrote cheques for the following expenses:
 - \$350 paid to Telstra for telephone connection
 - \$1 500 paid for rent to Chelsea Properties Pty Ltd.

To revise the steps in preparing a bank reconciliation, return to chapter 3, pages 218–33.

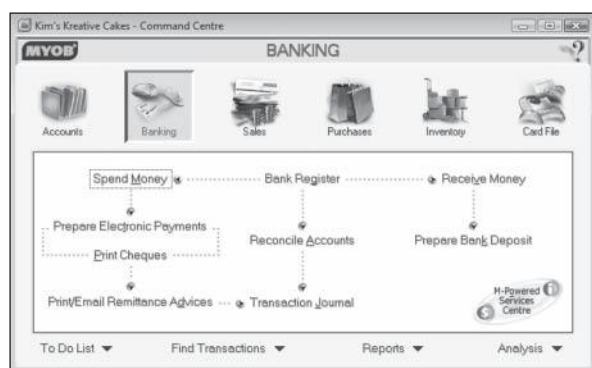
Bank reconciliation

A bank reconciliation can be completed within a computerised accounting system using similar procedures to that in the manual system. Although the report generated may be structured differently, the concepts are the same. The process is to reconcile the balance in the bank account with the balance stated on the bank's record (the bank statement). There are a number of reasons for discrepancies between the two figures, but once the business's records are updated with previously unknown information from the bank statement, the only reasons for any discrepancy between the two figures will be due to:

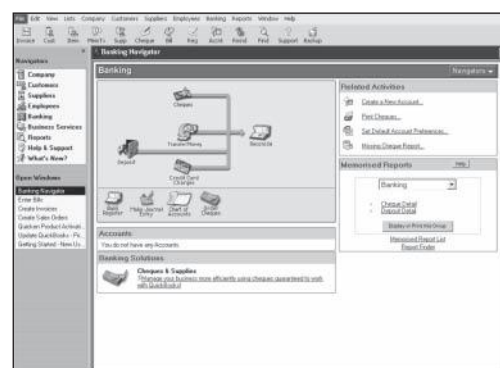
- cheques that have been written but not presented
- deposits that have been made to the bank but that have not appeared on the statement due to the timing of the bank statement
- errors made by the bank.

The banking module in *MYOB* is used to prepare a bank reconciliation statement [15.12a]. In *QuickBooks*, the banking and credit cards module is used [15.12b].

[15.12a]



[15.12b]



PRACTICE EXERCISE 6

J Cooper commenced business as a superannuation consultant on 1 July 2010. He would like to use a computerised accounting system and has presented you with the following transactions for the month of July. Prepare the books for J Cooper using a prepared data file, and present a reconciliation report as at 31 July 2010.

2010

- July 6 Deposited \$50 000 into the business's bank account as capital. (No GST is applicable.)
- 9 Billed J Robinson \$2 500 for consultancy.
- 15 Paid \$220 for rent to W Fletcher.
- 17 Received part payment of \$1 000 from J Robinson.
- 21 Paid \$640 to Quick Print It Pty Ltd for printing of office stationery.
- 29 Received cash of \$1 000 for consultancy services rendered to a client.
- 30 J Cooper withdrew a cheque for \$300 for personal use.
- 31 Received the following statement from Federated Bank of Australia:



Federated Bank of Australia, Longreach Branch
Statement of account
J Cooper

Date	Transaction	Debit	Credit	Balance
2010				
July 06	Deposit		50 000	50 000 Cr
16	Chq 00001	220		49 780 Cr
17	Deposit		1 000	50 780 Cr
23	Chq 00002	640		50 140 Cr
29	Deposit		1 000	51 140 Cr
31	Bank fees and charges	40		51 100 Cr

▶ Exercise 15.13, page 767

Transactions with inventories (trading industry)

Three types of transactions involving inventories for a trading industry will be addressed initially:

- setting up inventory items
- purchase of inventories (cash and credit)
- sales of inventories (cash and credit)
- inventory returns (purchases and sales).

Setting up inventory items

Service and trading businesses earn revenue by making sales. Whereas a service business sells its services, a trading business buys, stores and sells items of stock (inventory).

When a business that has inventory operates a computerised accounting system, each item of inventory is recorded with a unique code so that it can be identified as it is purchased and sold. In a computerised system, reports about sales of items and stock levels are easily generated. Through these reports, effective controls can be maintained over inventories, which are a valuable asset for a trading business.

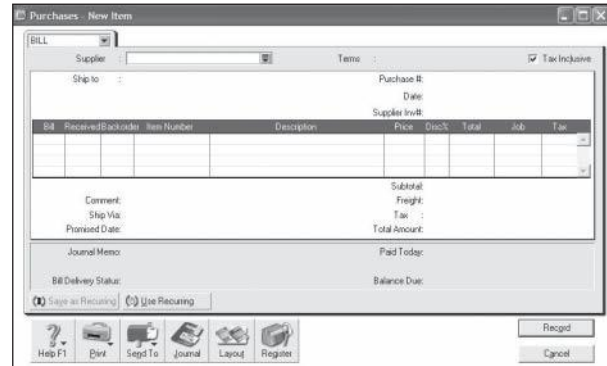
If an existing business converts to computerised records, then inventory on hand will need to be set up in the system at its cost price. The total cost of the inventory is then recorded as the inventory balance when recording opening balances in the system.

Purchase of inventories (cash and credit)

When inventory is purchased, it is recorded in the purchases module. Individual inventory items are set up by recording either a purchase order or an invoice for goods that have been purchased for cash or on credit. Both the cost price and the selling price are recorded for each inventory item during the setting-up procedure. In *MYOB*, choose the purchases module and then 'Enter purchases'. Be sure to choose the 'item' layout [15.13].

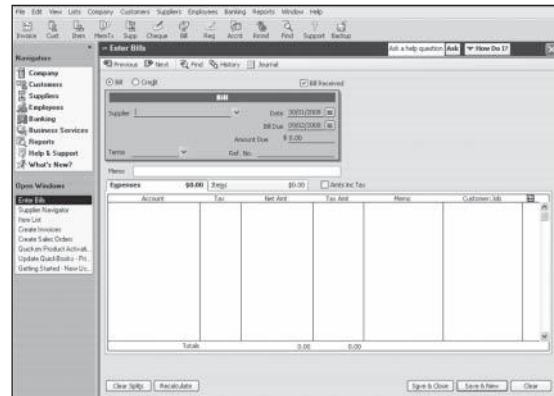
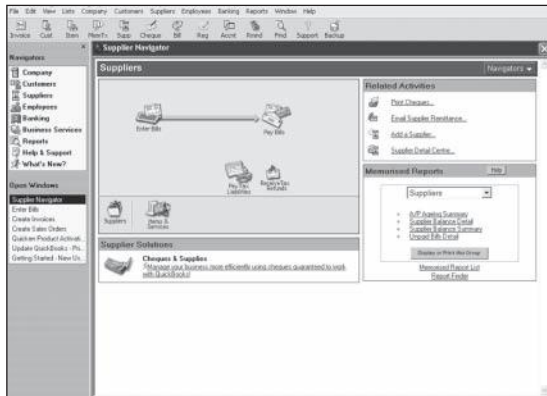


[15.13]



In *QuickBooks*, choose the purchases and suppliers module and then select either 'Purchase order' or 'Receive item with bill' [15.14].

[15.14]

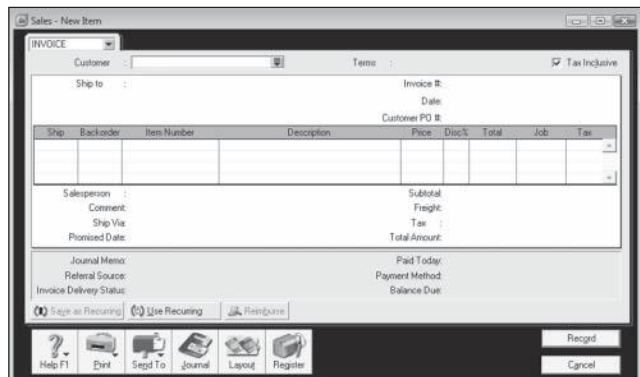
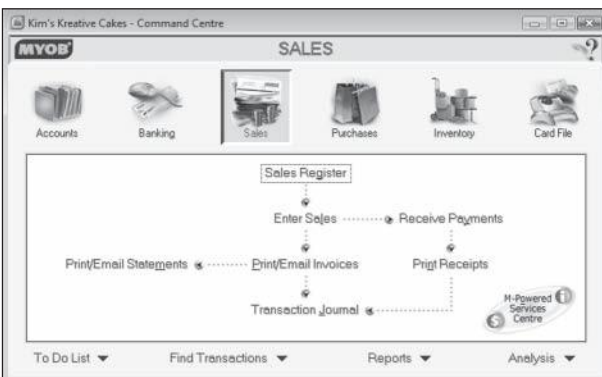


Sales of inventories (cash and credit)

When inventory is sold, it is recorded in the sales module. Individual inventory items are recorded in an invoice generated for the sale. The only distinction between a cash sale and a credit sale of inventory is that cash is recorded as having been received for the sale.

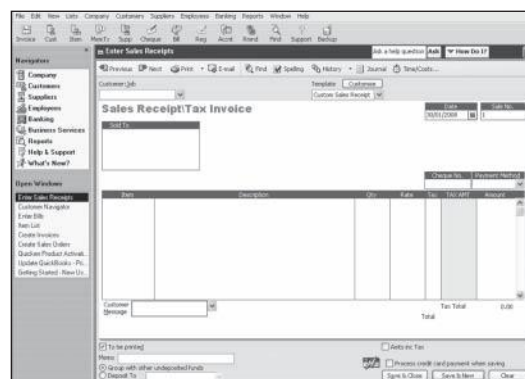
In *MYOB*, choose the sales module and then 'Enter sales' [15.15].

[15.15]



In *QuickBooks*, choose the sales and customers module and then select either 'Credit sale' or 'Cash sale' [15.16].

[15.16]



PRACTICE EXERCISE 7

S Rubie commenced business as a retailer of novelty items on 1 July 2010. She would like to use a computerised accounting system and has presented you with the following transactions for the month of July. (All figures include GST where appropriate.) Prepare the books for S Rubie using a prepared data file. Print an income statement and an item list as at 31 July 2010.

2010

July 3 Deposited \$150 000 into the business's bank account.

6 Purchased the following inventory items on credit from Crazy Wholesalers:

- Item 1 600 message bears @ \$1.65 each (selling price \$3)
- Item 2 290 x 19 cm beach buckets @ \$1.40 each (selling price \$2)
- Item 3 500 aluminium scooters @ \$13.99 each (selling price \$19.99)
- Item 4 400 deluxe CD holders @ \$3.20 each (selling price \$5)

9 The following cash sales were made:

- 22 x item 4 deluxe CD holders
- 13 x item 1 message bears
- 9 x item 3 aluminium scooters
- 10 x item 2 beach buckets

12 Sold the following items on credit to Lantana Holdings Pty Ltd:

- Item 1 60 message bears
- Item 2 30 x 19 cm beach buckets
- Item 3 50 aluminium scooters
- Item 4 40 deluxe CD holders

15 Purchased the following inventory items for cash:

- Item 5 400 velour beach towels in bag @ \$7.36 each (selling price \$12.99)
- Item 6 1 000 sequenced rosette cushions @ \$4.79 each (selling price \$9.99)

► Exercises 15.14 and 15.15, pages 767–8



Inventory returns (purchase and sales)

The purchase and sale of inventory items means that sometimes (for many different reasons) stock is returned and either a cash refund is given or an adjustment note issued. The effect is to decrease the value of the original invoice. Stock that is in good condition can be returned to the shelves. Damaged stock cannot be returned to the shelves to be resold and must be accounted for as a stock loss.

PRACTICE EXERCISE 8

James Staples began business as a retailer of computer goods on 1 July 2010. This is a trading business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print an income statement as at 31 July 2010.

2010

- July 1 James deposited \$120 000 cash as capital into a bank account to begin his business.
- 5 Purchased the following inventory items from Computers Direct:
 - 10 IBM Thinkpads Model # 2655-37A @ \$1 900 each; selling price \$2 999
 - 10 IBM E Servers Model # 8478-71X @ \$1 200 each; selling price \$1 999
- 8 Returned a faulty Thinkpad to the supplier. Received an adjustment note valued at \$1 900.
- 10 Sold one Thinkpad and one E Server to a cash customer.
- 11 Cash customer returned one Thinkpad after deciding they needed a desktop computer instead. A full cash refund was made.
- 16 Sold five Thinkpads and three E Servers to Landsdowne Computers at Caboolture.
- 20 Landsdowne Computers returned one Thinkpad, as the owner decided that it was excess to requirements.

► Exercises 15.16 to 15.22, pages 768–771



Other transactions

Four additional types of transactions for a service or trading industry will be addressed:

- 1 correction of 'forced errors' (where the original entry cannot be directly edited)
- 2 inventory discrepancies
- 3 balance-day adjustments
- 4 rollover to a new accounting period.

Correction of forced errors

Although 'forced' errors do not occur in reality, a technique used when learning how to correct the errors that occur naturally is to make errors happen, or 'force' them.

Inventory discrepancies

One of the fundamental principles of accounting is the accounting period assumption. This means that the life of the business is divided into arbitrary periods, generally 12 months. The final day of the accounting period is called balance day. This is the day when revenues and expenses are compared and a profit or loss is determined. An important task on this day for a trading business is to count the stock and give it a value. This is called a stocktake. Even though the number of stock and its value is recorded in a computerised accounting system, a stocktake must be carried out to ensure that the actual value matches the recorded value. Discrepancies must be accounted for in the determination of a profit or loss.

Balance-day adjustments

In addition, balance-day adjustments to revenue and expense items are recorded in order to match expenses incurred against revenues earned. These adjustments are book entries made only for accounting purposes because revenues and expenses generally fall short of, or extend beyond, 30 June.

Balance-day adjustments are completed in a computerised accounting system in the same way as in a manual accounting system.

- 1 Consider which accounts the adjustment affects.
- 2 If using the system defaults, print out a chart of accounts to determine the account numbers allocated to the accounts that need adjustments. The following temporary asset and liability accounts will need to be created (if applicable) on balance day in order to prepare the adjustment entries:

Current asset accounts:

- prepaid expenses account
- accrued revenues account

Current liability accounts:

- accrued expenses account
- unearned revenues account

- 3 Calculate the value of the adjustment.
- 4 Make the adjustments by debiting and crediting the appropriate accounts in a general journal entry.

Review chapters 2 and 10.

Rollover to a new accounting period

Learning objective 5

To prepare the accounts in readiness for a new financial year, a number of end-of-period procedures sometimes known as 'the end-of-period rollover' must be carried out. These procedures do not necessarily all take place on 30 June (or the last day of the financial period). For example, stocktaking is carried out as near as possible to the end of the accounting period and, once stock on hand is determined, the business returns to recording transactions for the new year.

When preparing reports, only transactions for the accounting period in question are considered. The revenue and expense accounts, once balance-day adjustments have been taken into account, are closed off in the same way as in a manual system. However, in an accounting package, this is done by the program in one command. These accounts are transferred (closed off) and profit is determined. The accounts are then reset to 'zero' in readiness for the next accounting period. Because this is a permanent action, backups of data are performed before and after the adjustments and reconciliations but before the rollover is completed. This ensures that a backup of the data is available in case errors occur in the process.

Steps to complete the end-of-period rollover



- 1 Back up the data file.
- 2 Reconcile inventory records with the figures obtained from the stocktake conducted on 30 June.
- 3 Reconcile bank accounts.
- 4 Print a schedule of accounts receivable and accounts payable.
- 5 Reconcile GST accounts (ensure that correct transactions have been recorded).
- 6 Record balance-day adjustments.
- 7 Back up the data file again after the balance-day adjustments have been made.
- 8 Rollover the accounts to a new accounting period.
- 9 Prepare the necessary reversing entries.

PRACTICE EXERCISE 9

On 1 June, Mrs J Dwyer commenced business as a newsagent and deposited \$53 000 into the business's bank account. The following transactions occurred in June:

- June 1 Paid Coolangatta Realty \$800 for rent in advance for two months.
- 4 Paid Optus \$600 for telephone.
- 15 Received \$900 commission from Readabooks Ltd.
- 25 Paid Australia Post \$100 for stamps.
- 30 The following balance-day adjustments are required:
 - \$364 rent is prepaid.
 - Telephone line rental paid in advance is \$187.
 - \$400 of the commission received is for the period 1–15 July.
 - \$90 of stamps are still on hand.
 - Accrued electricity expense is \$120.

Perform a rollover into the next accounting period and prepare reversing entries in the new accounting period.

Print the following:

- session report for the period to 30 June 2010
- trial balance before rollover
- trial balance after rollover.

The complete accounting process summarised

Each of the practice exercises to this point has incorporated an aspect of the complete accounting process. Exercise 11 combines all of these previous elements so that you can see this complete process in a nutshell.

PRACTICE EXERCISE 10

Sara Fenton began her business, Gifts by Sara, on 1 June 2010, one month before the end of the 2010 financial year. Enter the following transactions for the month of June:

- June 1 Sara deposited \$10 000 cash as capital in a bank account in the name of the business. (No GST is applicable.)
- 2 Sara purchased the following inventory items on credit from Fragrant Petals Pty Ltd:
 - #1 100 smelly soaps @ \$3.50 each; selling price \$7 each
 - #2 100 potpourri sachets @ \$2 each; selling price \$4 each
 - #3 100 scented drawer liners @ \$6 each; selling price \$12.00 each
- 4 Sold 20 potpourri sachets to Gifts R Us for \$4 each.
- 5 Agreed to sell paintings by artists represented by the Sunshine Coast Artists' Collective. The commission negotiated was 30% to be paid 10 days after the end of each month.
- 6 Wrote a cheque for \$330 to pay for advertising in the local newspaper, *Sunshine Coast Herald*. This charge covers advertising for three months: June, July and August.
- 7 Wrote cheque to pay Office Suppliers Ltd \$900 for stationery.
- 9 Received funds of \$20 000 from the bank because of a loan application. Record the deposit paid into the cheque account and the long-term loan from Westpac Banking Corp.
The cheque written on 7 June was found to be in error. The amount was for \$600.
- 12 Paid Fragrant Petals a cheque for the full amount owing on account.
- 15 Cash sales for the period:
 - 50 x #1 smelly soaps
 - 23 x #2 potpourri sachets
 - 15 x #3 scented drawer liners
- 25 Purchased 75 of stock item #1 smelly soaps from Fragrant Petals Pty Ltd and paid by cheque the same day.
A cash customer returned one scented drawer liner and was given a cash refund.
Received notification that Gifts R Us was in receivership. Write this account off as a bad debt.
- 30 A manual stocktake revealed the following items in stock:
 - 124 x #1 smelly soaps
 - 57 x #2 potpourri sachets
 - 85 x #3 scented drawer liners

Back up the data file at this point (name this file *SF backup 1*).

Balance-day adjustments

Print an item list to compare the number of items that should be in stock. Prepare an adjustment to account for any discrepancy between actual stock on hand and stock recorded as being on hand.

The following revenues and expenses require adjustment:

- advertising (paid on 6 June)
- wages owing \$350; interest on loan owing \$150
- \$4 850 worth of paintings have been sold on behalf of the Sunshine Coast Artists' Collective. Calculate and adjust for the commission owing.



End-of-period reports

- Prepare a bank reconciliation (no deposits or cheques are outstanding, balance as per bank statement is \$28 252.50 Cr, but bank fees and charges amount to \$15.00).
- Prepare a GST report based on a cash basis for the period 1 to 30 June 2010.
- Prepare an income statement for the year ended 30 June 2010.
- Prepare a balance sheet as at 30 June 2010.

Rollover into the new period

- Back up the data file once more (name this file *SF backup 2*).
- Following the procedure advised in the accounting package you are using, perform an end-of-period rollover that will have the effect of closing off all revenue and expense accounts, taking the balances of these accounts back to zero and debiting or crediting the difference to the retained earnings (capital) account.
- As at 1 July 2010, prepare reversing entries for the following accounts: prepaid advertising, accrued expenses for wages and interest, and accrued commission revenue.

► Exercises 15.28 to 15.31, pages 774–81

Generating appropriate information in reports

Learning objective 6

Reports and data from an accounting package are an important end product of the accounting process. These reports are customised (changed to suit the business) and generated for analysis and interpretation, and decision-making purposes.

Customising reports and forms

When using accounting software, reports and forms (invoices, purchase orders and so on) are customised to suit the needs of the business. Some packages allow only limited customisation, but in other packages customisation is a feature that sets them apart from their competition.

End-of-period reports are customised through the set-up of headings and totals for sections and sub-sections. This can be achieved through the customisation of the chart of accounts.

Generating reports

Numerous types of reports are available in an accounting package. It is important, therefore, to become familiar with the types of reports and their purpose, and to choose the most appropriate report for the task before printing. Reports are very easily generated from the data in an accounting system. Before printing, check that:

- the dates are correct (this is sometimes called customising or setting the 'filters')
- the columns presented give the information required
- the report will print on the fewest number of pages possible.

Data exchange with spreadsheeting applications (import/export)

The ability to import and export data into other software packages, particularly a spreadsheet such as Excel, has considerably improved the flexibility of accounting packages and their ability to produce information for decision-making in whatever form is desired.

Data exchange is also important for public accountants. Clients are able to email data produced by various accounting packages to them for end-of-period

adjustments and the production of end-of-period reports (mainly for taxation purposes). This speeds up the work of the accountant and is a much more portable method of getting the records to the accountant at the end of the period.

PRACTICE EXERCISE 11

Retrieve the file created in practice exercise 10 for Sara Fenton's business, Gifts by Sara, which was saved as *SF backup 2*. Reprint the balance sheet after customising it in the following manner:

- change the fonts used in the report
- introduce classifications for current and non-current assets and liabilities.

Export the balance sheet into a spreadsheet application and calculate the following ratios using the figures in the statement:

- working capital ratio (current assets/current liabilities)
- equity ratio (owner's equity/total assets)
- debt ratio (total liabilities /total assets).

► Exercise 15.32, page 781

Interpretation of reports and decision-making

Learning objective 7 The main reason for using an accounting package is the ability to produce timely, accurate reports. Interim reports can easily be produced at any time. At the end of the period, final reports are produced. These reports can be used to help evaluate performance and are used for analysis and interpretation of the many facets of the business.

Accounting packages can produce comparative figures over a period of time, and can also produce reports with vertical analysis completed, as shown in [15.17].

[15.17]

	This Year	Last Year	\$ Difference	% Difference
Assets				
Current Assets				
General Cheque Account 1	\$97,272.82	\$100,000.00	-\$2,727.18	(2.7%)
General Cheque Account 2	\$150,000.00	\$150,000.00	\$0.00	0.0%
Clearwater Provision Account	\$64,217.19	\$0.00	\$64,217.19	NA
Clearwater Investment Account	\$20,000.00	\$0.00	\$20,000.00	NA
Electronic Clearing Account	-\$31,944.87	\$0.00	-\$31,944.87	NA
Payroll Cheque Account	-\$14,953.48	\$0.00	-\$14,953.48	NA
Inventory	\$22,042.37	\$0.00	\$22,042.37	NA
Trade Debtors	\$8,078.24	\$0.00	\$8,078.24	NA
Total Current Assets	\$314,712.27	\$250,000.00	\$64,712.27	25.9%
Withholding Credits				
Voluntary Withholding Credits	\$560.00	\$0.00	\$560.00	NA
Total Withholding Credits	\$560.00	\$0.00	\$560.00	NA
Furniture & Fittings				
F & F - At Cost	\$1,250.00	\$0.00	\$1,250.00	NA
Total Furniture & Fittings	\$1,250.00	\$0.00	\$1,250.00	NA
Total Assets	\$316,522.27	\$250,000.00	\$66,522.27	26.6%
Liabilities				
Current Liabilities				
Payroll Liabilities				
PAYG Withholdings Payable	\$18,087.00	\$0.00	\$18,087.00	NA
Superannuation Payable	\$9,755.54	\$0.00	\$9,755.54	NA
Total Payroll Liabilities	\$27,842.54	\$0.00	\$27,842.54	NA
Trade Creditors	\$31,408.75	\$0.00	\$31,408.75	NA
Total Current Liabilities	\$59,251.29	\$0.00	\$59,251.29	NA
GST Liabilities				
GST Collected	\$13,189.50	\$0.00	\$13,189.50	NA
GST Paid	-\$7,658.56	\$0.00	-\$7,658.56	NA
Sales Tax Payable	\$257.51	\$0.00	\$257.51	NA
Total GST Liabilities	\$12,788.45	\$0.00	\$12,788.45	NA
Total Liabilities	\$72,039.74	\$0.00	\$72,039.74	NA

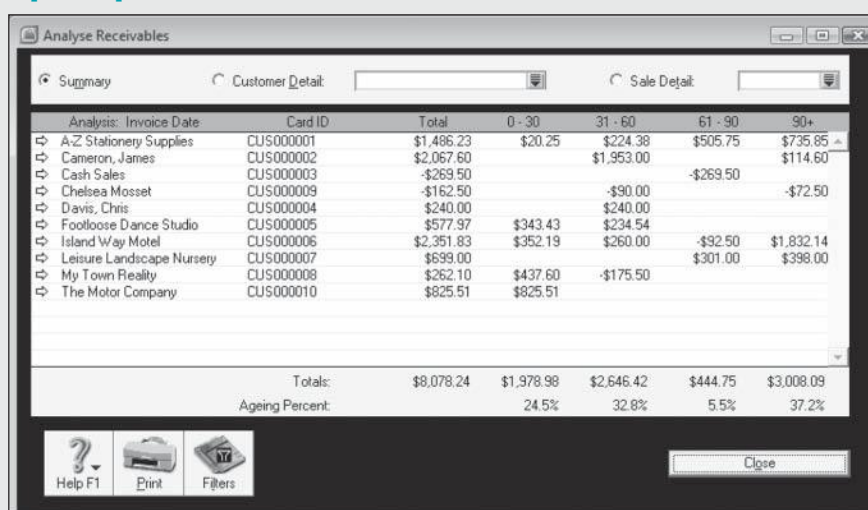
Reports readily produced by accounting packages that need interpretation for decision-making are as follows:

- Aged analysis of accounts receivable. This report can be the basis for a decision about the amount of bad debts to write off and to provide for in the coming accounting period.
- Inventory analysis. Purchasing decisions could be based on this report. A value for stock would also be ascertained once an adjustment for any stock discrepancies is made.

PRACTICE EXERCISE 12

- a Using the analysis of receivables report for Clearwater Pty Ltd shown in [15.18], determine a credit policy for this business that indicates the procedures to be followed when giving credit, collecting debts from accounts receivable, writing off bad debts, and determining the provision for doubtful debts for the end of the accounting period.

[15.18]

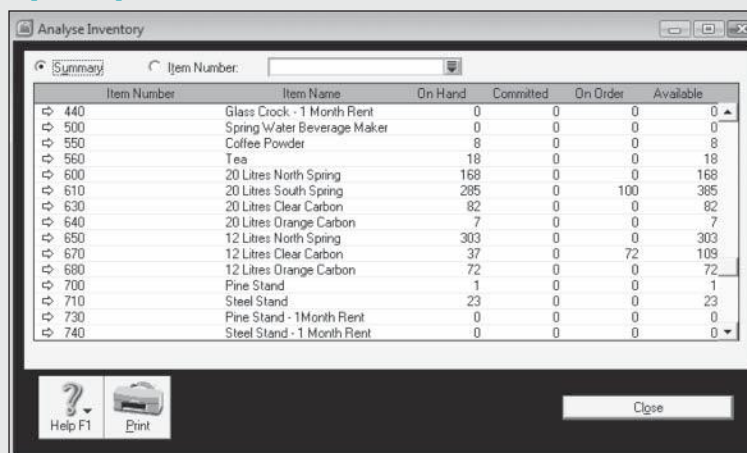


The screenshot shows the 'Analyse Receivables' window with the 'Summary' tab selected. It displays a table of receivables categorized by age groups: 0-30, 31-60, 61-90, and 90+ days. The table includes columns for Invoice Date, Card ID, Total, and the four age groups. The data is as follows:

Analysis: Invoice Date	Card ID	Total	0 - 30	31 - 60	61 - 90	90+
A-Z Stationery Supplies	CUS000001	\$1,486.23	\$20.25	\$224.38	\$505.75	\$735.85
Cameron, James	CUS000002	\$2,067.60		\$1,953.00		\$114.60
Cash Sales	CUS000003	-\$269.50			-\$269.50	
Chelsea Mosset	CUS000009	-\$162.50		-\$90.00		-\$72.50
Davis, Chris	CUS000004	\$240.00		\$240.00		
Footloose Dance Studio	CUS000005	\$577.97	\$343.43	\$234.54		
Island Way Motel	CUS000006	\$2,351.83	\$352.19	\$260.00	-\$92.50	\$1,832.14
Leisure Landscape Nursery	CUS000007	\$699.00			\$301.00	\$398.00
My Town Realty	CUS000008	\$262.10	\$437.60	-\$175.50		
The Motor Company	CUS000010	\$825.51	\$825.51			
Totals:		\$8,078.24	\$1,978.98	\$2,646.42	\$444.75	\$3,008.09
Ageing Percent:			24.5%	32.8%	5.5%	37.2%

- b Using the analysis of inventory report for Clearwater Pty Ltd shown in [15.19], determine which items need to be reordered.

[15.19]



The screenshot shows the 'Analyse Inventory' window with the 'Summary' tab selected. It displays a table of inventory items with columns for Item Number, Item Name, On Hand, Committed, On Order, and Available. The data is as follows:

Item Number	Item Name	On Hand	Committed	On Order	Available
440	Glass Crock - 1 Month Rent	0	0	0	0
500	Spring Water Beverage Maker	0	0	0	0
550	Coffee Powder	8	0	0	8
560	Tea	18	0	0	18
600	20 Litres North Spring	168	0	0	168
610	20 Litres South Spring	285	0	100	385
630	20 Litres Clear Carbon	82	0	0	82
640	20 Litres Orange Carbon	7	0	0	7
650	12 Litres North Spring	303	0	0	303
670	12 Litres Clear Carbon	37	0	72	109
680	12 Litres Orange Carbon	72	0	0	72
700	Pine Stand	1	0	0	1
710	Steel Stand	23	0	0	23
730	Pine Stand - 1 Month Rent	0	0	0	0
740	Steel Stand - 1 Month Rent	0	0	0	0

- c Interpret the transaction list for Homebush Homes in the books of Stadium Constructions & Hardware Pty Ltd, as shown in [15.20].

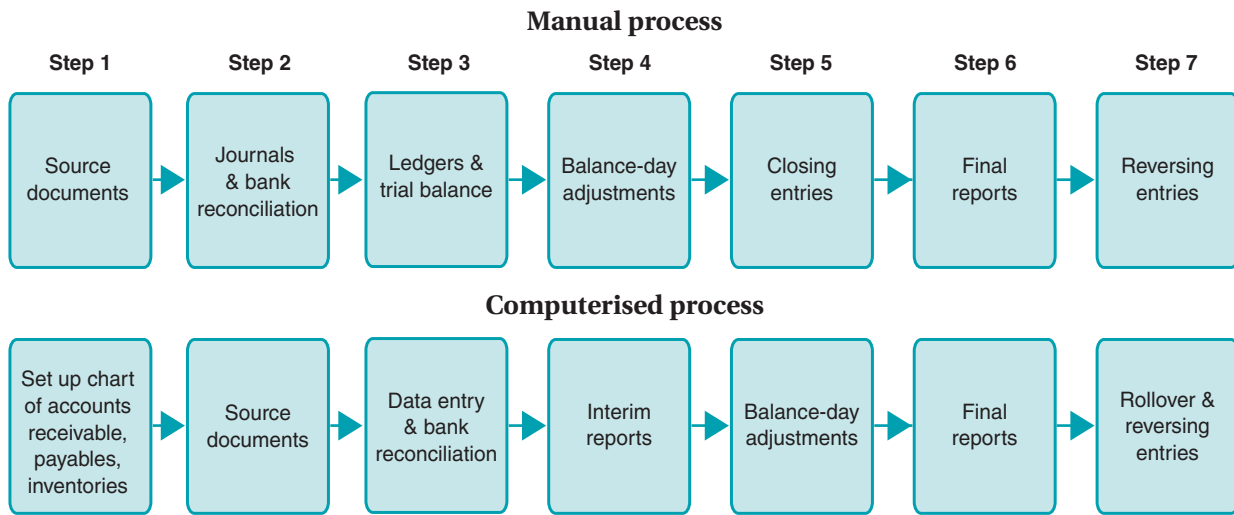
[15.20]

Type	Date	Num	Desc	Account	Clr	Split	Amount
Hadrians Wall Company							
Sales Receipt/Tax Invoice	19/10/2002	28		ABC Bank	✓	-SPLIT-	3,762.75
Homebush Homes							
Tax Invoice	02/10/2002	13		Accounts Receiva...		-SPLIT-	836.00
Payment	17/10/2002			ABC Bank	✓	Accounts Re...	836.00
Olympic Park							
Tax Invoice	05/10/2002	14		Accounts Receiva...		-SPLIT-	1,321.75
Payment	17/10/2002			ABC Bank	✓	Accounts Re...	1,321.75
Square Blocks Ltd							
Tax Invoice	25/10/2002	16		Accounts Receiva...		-SPLIT-	449.15
Payment	26/10/2002			ABC Bank	✓	Accounts Re...	449.15
Techman Engines Pty Ltd							
Tax Invoice	23/10/2002	15		Accounts Receiva...		-SPLIT-	92.40
Payment	26/10/2002			ABC Bank	✓	Accounts Re...	92.40

► Exercise 15.33, pages 782–3

Understandings

- A computer system consists of hardware, software and people.
- An accounting package is just one part of a larger information system in any organisation.
- An accounting package allows the user to input, process, store, and output data and information.
- An accounting package allows for automatic postings. This means that the user of the package does not have to enter every debit and credit entry, as would be the case in a manual system.
- An accounting package records business transactions and provides information for decision-making. Additional modules/applications can be purchased for payroll, non-current assets, job costing and generating reports.
- The use of an accounting package provides greater control over the operations of the business, because timely reports can be produced.
- The sequence of processing changes in a computerised accounting system, as shown on page 765.



- Source documents may not necessarily be paper-based. They may be electronically generated (or computer-generated).
- An accounting package may have a flexible chart of accounts so that it can meet the needs of different businesses, or it may have pro-forma charts of accounts that the user can customise for their own particular business.
- Transactions are entered into the package according to the type of transaction, e.g. sales, purchases, cash received or paid.
- Backing up data is an important task that must be performed regularly.
- Because the computer does most of the processing, an audit trail is a common feature of computer accounting output. This is a printed record of all transactions that have been entered. It can be used to verify the validity of the entries entered into the system.
- The need to account for GST has encouraged many small business owners to use accounting packages for recording their business transactions. Such packages also help in the regular completion of a BAS.
- The main reason for using an accounting package is the ability to produce timely and accurate reports. Reports can easily be produced at any time, and be used to help evaluate performance.
- An accounting package can provide a variety of reports that can aid in interpretative analysis for decision-making. Typical reports include:
 - income statement
 - balance sheet
 - trial balance
 - ratio analysis of financial reports
 - analysis of aged balances for accounts receivable
 - accounts receivable statements
 - accounts receivable list
 - analysis of aged balances for accounts payable
 - accounts payable list
 - inventory quantity and valuation report
 - inventory price lists
 - inventory reorder report.
- The end-of-period rollover makes accounts ready for a new month or new financial year.

Exercises

★ 15.1 Components of a computerised accounting system

Explain the four components of a computerised accounting information system, and describe the advantages of such a system over a manual system.

★ 15.2 Stages of the accounting process

a List the four stages of the accounting process.

b Briefly explain the meaning of each stage for a computerised system.

★ 15.3 Features of a computerised accounting system

Prepare an advertisement using presentation software for a new accounting package called *Account for It!* The advertisement should indicate the features of an accounting package.

★ 15.4 Terminology

Define the terms 'data', 'information' and 'business data processing'.

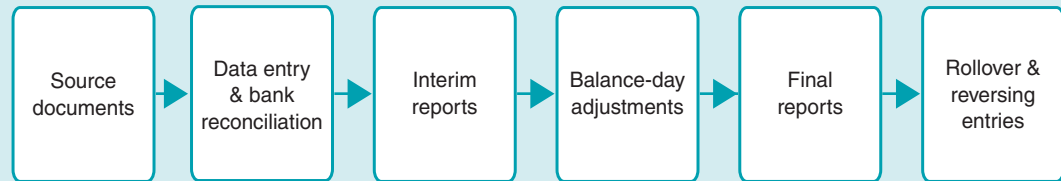
★★ 15.5 Factors to consider when implementing a computerised system

Prepare a report for a client who is considering changing to a computerised accounting system. What are the factors that the client should take into consideration before making the change?

★★ 15.6 Comparing the processes

The following flowchart illustrates the accounting process for a computerised system. Prepare a flowchart to show the process for the manual system and list the differences.

The **computerised** process is:



★★ 15.7 Benefits of a computerised system

Prepare an analysis using the 5Ws and an H on the following topic: 'A computerised accounting system is superior to a manual accounting system.'

★★ 15.8 Costs versus benefits

Explain the importance of the costs versus benefits principle when considering the type of accounting system a business may wish to implement.

★ 15.9 Cash transactions – service industry

Louise Nardi began business as an interior design consultant on 1 July 2010. This is a service business. Using a data file created for this business in either *MYOB* or *QuickBooks*, enter the following transactions and print a balance sheet as at 31 July 2010.

2010

July	1	Louise deposited \$20 000 cash as capital into a bank account set up in the name of the business.
	6	Louise received commission of \$880 for allowing another company logo to appear beside her own logo on her car.
	12	Paid \$200 as wages for a part-time assistant, C Merouze.
	28	Louise withdrew cash of \$1 000 for her own use.

★ 15.10 Customer transactions (service industry)

Greg Bland began business as a painting contractor on 1 July 2010. This is a service business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print an income statement as at 31 July 2010.

2010

- | | | |
|------|----|--|
| July | 1 | Greg deposited \$30 000 cash as capital into a bank account to begin his business. (No GST is applicable.) |
| | 5 | Greg painted a house for a client and charged \$2 200 for his services. The client paid immediately in cash. |
| | 13 | Greg billed a client, R Lockridge, \$2 400 for services rendered. |
| | 17 | Greg billed a client, M Matty, \$880 for painting services. |
| | 25 | R Lockridge remitted a cheque for \$2 400 in full payment of account. |
| | 29 | M Matty paid his account. Received \$880. |

★ 15.11 Bad debts (customers)

Kerry Kirkwood began business as an electrical contractor on 1 July 2010. This is a service business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print an income statement and balance sheet as at 31 July 2010.

2010

- | | | |
|------|----|---|
| July | 1 | Kerry deposited \$10 000 cash as capital into a bank account to begin his business. (No GST is applicable.) |
| | 5 | Kerry billed a client, R Peters, \$1 300 for electrical wiring. |
| | 8 | Kerry billed a client, J Henry, \$990 for services rendered. |
| | 11 | R Peters paid her account. |
| | 29 | Received notification that J Henry is unlikely to be able to settle his account now or in the future. Write this account off as a bad debt. |

★ 15.12 Supplier transactions (service industry)

Neil Scothern began his business as a statistician on 1 July 2010. This is a service business. Using a data file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print a balance sheet as at 31 July 2010.

2010

- | | | |
|------|----|--|
| July | 1 | Neil deposited \$30 000 cash as capital into a bank account to begin his business. (No GST is applicable.) |
| | 5 | Neil received notice that the \$20 000 loan for computer equipment was approved by Westpac and that the loan funds were deposited in his bank account. (No GST is applicable.) |
| | 8 | Purchased \$15 000 worth of computer equipment from Qld Computers. |
| | 12 | Paid \$4 250 using cheque #1 to Qld Computers. |
| | 14 | Neil purchased supplies for the business on credit from SB Ltd for \$440. |
| | 15 | Neil writes cheques #2 and #3 to pay for the following expenses: <ul style="list-style-type: none"> • \$350 to Optus for a mobile telephone service • \$200 for advertising to the Western Star Newspaper. |

★★ 15.13 Bank reconciliation

G Latchford commenced business as a financial consultant on 1 July 2010. He would like to use a computerised accounting system and has presented you with the following transactions for the month of July. Prepare the books for the month using a data file prepared for this business. Print a bank reconciliation report as at 31 July 2010.

2010

- July 6 Deposited \$150 000 into the business's bank account as capital. (No GST is applicable.)
 9 Billed J Strong \$865 for consultancy services.
 15 Paid \$2 200 for rent to K Flinders.
 17 Received payment of \$865 from J Strong.
 21 Paid \$1 230 for office supplies from Offices R U.
 29 Received cash of \$1 000 for consultancy services rendered to a client.
 30 G Latchford withdrew a cheque of \$1 200 for personal use.
 31 Received the following statement from Federated Bank of Australia:

**Federated Bank of Australia
 Cairns Branch
 Statement of account
 G Latchford**

Date	Transaction	Debit \$	Credit \$	Balance \$
2010				
July 6	Deposit		150 000	150 000 Cr
10	Chq 00001	2 200		147 800 Cr
12	Account keeping fee	9		147 791 Cr
17	Deposit		865	148 656 Cr
21	Chq 00002	1 230		147 426 Cr
29	Deposit		1 000	148 426 Cr
31	Chq 00003	1 200		147 226 Cr
	Interest		12	147 238 Cr

★★ 15.14 Trading business – inventories

No crocodiles were harmed in the making of this exercise!

Sally Stevens commenced business as a retailer of Australian-made shoes on 1 July 2010. She would like to use a computerised accounting system and has presented you with the following transactions for the month of July 2010. Prepare the books for S Stevens using a prepared data file. Also prepare an income statement and an item list as at 31 July 2010. All prices include GST.

2010

- July 3 Deposited \$50 000 into the business's bank account as capital to begin the business.
 6 Purchased the following inventory items on credit from Far North Shoes:
 Item 1 50 crocodile skin shoes at \$44 each (selling price \$176)
 Item 2 88 boot scooting boots at \$132 each (selling price \$220)
 Item 3 25 diamante mules at \$143 each (selling price \$275)
 12 Sold the following items on credit to Apple Holdings Pty Ltd: 20 of item 1, 20 of item 2 and 10 of item 3.
 15 Purchased the following inventory items for cash from ABC Ltd: Item 3, 50 diamante mules at \$120.

★★ 15.15 Cash/credit sales and purchases

Shellie Shanahan, a long-time ballet and tap dancer, has decided to open her own retail store selling various items of dancewear. She hopes to expand into aerobics and gym wear eventually, but is prepared to start on a small scale. As a friend, you offer to help her with her accounts. You have access to a computer accounting package and your task is to record her first week's transactions (cost prices and selling prices are inclusive of GST) using accounting software. Print an income statement as at 31 July 2010.

2010

- July 1 Shellie deposited capital of \$20 000 cash into an account opened in the name of her new business: Shellie's Dancewear.
- 2 Shellie opened a credit account with Flashdance Supplies Pty Ltd, a major supplier of dancewear. The following goods were supplied on credit from her order number 001:

	Cost price	Qty	Selling price
	\$	\$	\$
Leotards – pink	14.99 each	50	33.00
Ballet slippers	18.94 pair	45	25.30
Tights – pink	2.30 pair	100	5.50

- 4 Shellie purchased goods for cash from another supplier, Dance Wholesalers. She wrote out cheque number 001 for \$365.75 for the following goods, which were detailed on her order number 002:

	Cost price	Qty	Selling price
	\$	\$	\$
Sequins – red	0.55 metre	125	1.32
Headbands – pink	4.95 each	60	7.15

- 5 Shellie paid Shop Fitters Extraordinaire cheque number 002 for \$13 200 for fixtures and fittings.
- 6 Cash sales: three pink leotards, five pairs of tights, two pairs of ballet slippers.
- 7 Shellie paid Flashdance Supplies a part payment of \$1 000. She wrote out cheque number 003.

★★ 15.16 Customer returns

Trevor Hanley began business as a hardware retailer on 1 July 2010. This is a trading business. Using the file created for this new business in either *MYOB* or *QuickBooks*, enter the following transactions and print an income statement and balance sheet as at 31 July 2010.

2010

- July 1 Trevor deposited \$100 000 cash as capital into a bank account to begin his business.
- 5 Purchased premises for \$90 000 cash from ABC Ltd.
- 7 Purchased the following inventory items on credit from EMI Tool Suppliers (cost and selling prices are GST inclusive):
38 power tools item # 334 for \$288 each; selling price \$599.
10 welding tools item no # 2338 for \$200 each; selling price \$350
- 8 Returned a faulty welding tool to the supplier. Received an adjustment note valued at \$200.
- 10 Sold five power tools and two welding tools to cash customers. (Record this as one sale.)
- 11 Cash customer returned one power tool. A full cash refund was made to this customer, as the goods had been returned within a week.
- 13 Paid Telstra telephone account of \$550.
- 16 Sold three power tools and two welding tools to Townsville SHS, a trade customer.
- 20 Townsville SHS returned one power tool because it was excess to requirements.

★ 15.17 Cash/credit purchases and returns

Adrian Andrews commenced business as a retailer in the music industry, naming his business Adrian's Music Shop. He has one supplier, Qld Music Wholesalers, from whom he will purchase goods on credit on terms of 30 days net. Adrian will not offer any credit facilities to customers at this stage.

Transactions were as follows:

2010

- | | | |
|-----|----|--|
| Aug | 9 | Adrian banked cash of \$6 000 as capital. |
| | 10 | Stock items purchased on credit from supplier: <ul style="list-style-type: none"> • 10 model 21643 guitars @ \$200 each (selling price \$300) • 5 model 33944 guitars @ \$100 each (selling price \$150) • 3 trombones @ \$250 each (selling price \$375) • 2 drum sets @ \$1 500 each (selling price \$2 250) • 10 flutes @ \$120 each (selling price \$180) |
| | 11 | Bought furniture for the business for \$2 000 cash from ABC Co. |
| | 15 | Cash sales for the day: two model 33944 guitars; one trombone; three flutes. |
| | 16 | Drew cheque number 002 to pay wages of \$200 and rent of \$100. |
| | 17 | Paid Qld Music Wholesalers \$3 000 (cheque number 003). |

- a** Enter the information above in a computerised accounting system.
- b** Print all journals.
- c** Print a trial balance for Adrian for August.

★ 15.18 Returns: cash/credit sales and purchases

Fiona Roberts' business, Labels R Us, sells one item: a label printer. Selling price: \$440 each. Cost price: \$275.

Transactions for the month of August 2010 are:

- | | | |
|-----|----|---|
| Aug | 3 | Bought 100 printers on credit from Seiko Ltd, Sydney. |
| | 4 | Sold a printer for cash. |
| | 6 | E Montgomery, Windsor bought three printers on credit. |
| | 7 | Sent five printers that have a damaged label feeder back to Seiko Ltd. |
| | 10 | E Montgomery sent back one printer that was excess to requirements. |
| | 11 | Cash customer discovers that the label printer is not compatible with her computer. She returns the printer and asks for a cash refund. |

- a** Print an income statement for the month of August.
- b** Print an items transactions report for August.

★ 15.19 Returns: cash/credit sales and purchases

John Dickson's business, Tools R Us, sells one item: a complete tool kit that contains 500 tools. Selling price: \$199 each. Cost price: \$104 each.

Enter the following transactions for the month of November 2010 into a computerised accounting package and print an items transactions report:

2010

- | | | |
|-----|----|--|
| Nov | 1 | John deposited \$10 000 cash as capital into a bank account opened in the name of the business. |
| | 3 | Bought 100 tool kits on credit from Innovations Pty Ltd, Sydney. |
| | 4 | Sold one tool kit for cash. |
| | 6 | L McKenna, Bracken Ridge bought three tool kits on credit. |
| | 7 | Returned five tool kits to Innovations Pty Ltd. |
| | 10 | L McKenna returned one tool kit. John issued a credit note. |
| | 11 | A cash customer discovers that the tool kit does not contain an electrical crimping tool that she really needs. She returns the tool kit and requests a cash refund. |

★ 15.20 **Returns: cash/credit sales and purchases**

Record the following transactions that occurred in Jaclyn Ware's business in the month of October:

2010

- Oct 1 Jaclyn Ware commenced business as a trader of telescopes by depositing \$20 000 cash as capital into a bank account with Mettaway Bank in the name of J Ware Telescopes. Stock consists of only two types of telescopes at present. Their selling prices are:
- Pocket Telescope Code HSCO \$69 each
 - Powerful Zoomscope Code HSZO \$249 each
- 3 Purchased on credit from Scope Traders, Cooma, the following goods which were detailed on order number ZZZ001: 100 Powerful Zoomscopes @ \$110 each.
- 5 Purchased on credit from Practika Products, Mt Coot-tha: 100 Pocket Telescopes @ \$33 each, order number ZZZ002.
- 6 Credit sale to H Udu, Clayfield (order no. 766): five pocket telescopes.
- 10 Paid Scope Traders the full amount owing (cheque number 33001).
- 14 Received Westpac cheque no. 874722 from H Udu in settlement of her account.
- 30 Paid Practika Products in full (cheque number 33002).

You are required to print all journals for October.

★ 15.21 **Conversion to a computerised system**

Conrad Cassaniti trades as Cassaniti Computers. He has decided to convert from one computerised accounting program to another, but the data is not interchangeable. He will need to set up his business records from scratch. Prepare the records given the following information regarding the assets and liabilities of Conrad's business and print a balance sheet.

Assets

Inventories:

Item 111222 10 @ \$2 000 each	20 000
Item 333444 5 @ \$3 000 each	15 000

Accounts receivable:

N Macbeth	1 000	
F Moloney	3 000	4 000

Liabilities

Bank overdraft 2 400

Accounts payable:

N Springer	700	
J Lawrie	1 300	2 000

GST clearing 200

Calculate the value of Conrad's capital.

★★ 15.22 Conversion to a computerised system

As an accounting systems consultant, the following information is provided to you by Gerry Hook, Manager of Rods and Reels, 53 Crayfish Drive, Coomera, Ph: 3758 2938.

Rods and Reels Income statement for the year ended 30 June 2010

	\$	\$
Sales	75 000	
Less Cost of goods sold:		
Inventories (1/7/2009)	15 000	
Purchases	26 000	
	<u>41 000</u>	
Less Inventories (30/6/2010)	13 000	28 000
GROSS PROFIT		<u>47 000</u>
Less Expenses		
Advertising	10 000	
Office expenses	9 000	
Rent	13 000	
Interest on loan	7 000	39 000
NET PROFIT		<u><u>\$8 000</u></u>

Rods and Reels Balance sheet as at 30 June 2010

	\$	\$	\$
Owner's equity			
Capital	35 000		
Add Net profit	8 000		43 000
Represented by:			
Assets			
Bank	27 000		
Inventories	13 400		
GST receivable			
Motor vehicle	<u>30 000</u>	70 400	
Less Liabilities			
GST clearing	400		
Loan from TT Bank	<u>27 000</u>	<u>27 400</u>	
			<u>43 000</u>

Inventory stock sheet (Information from stocktake 30/6/2010):

Stock item no.	Count	Description	Item value (cost) \$	Retail selling price \$
01	40	Supertough Rods	220	315
02	42	Superstrength Reels	100	180

The transactions for 1–5 July 2010 are:

- July 1 Sold six rods on credit to K Fisher, Loganholme. It was decided that Rods and Reels' slogan 'SUPER catches!' is to appear on every invoice.
- 2 Gerry Hook increased the cost price mark-up on reels to 100%.
- 3 Sold 10 reels to Barry's Boats and Anchors for cash.
- 4 K Fisher returned one rod which was unsuitable for her requirements.
- 5 K Fisher paid her account in full.

- a Set up and print a chart of accounts.
- b Input the opening balances from the balance sheet.
- c Enter the transactions for July.
- d Print a trial balance as at 5 July 2010.

★ 15.23 **Correction of errors**

Using the data file created in exercise 15.16 for Trevor Hanley, make the following corrections. Print all journals.

- a The cash sales recorded on 10 July were incorrect. Only four power tools were sold.
- b The telephone account was paid to Telstra, but Hanley's account is with Optus. Cancel this cheque and reissue another made payable to the correct payee.

★ 15.24 **Correction of errors—with inventories**

Katie Strong's business, Gyms at Home, sells one item of inventory, a Body Shaper Complete Home Gym, that is purchased for \$600 and retails for \$890.

Enter the following transactions for December into a computerised accounting system:

- | | | |
|-----|----|---|
| Dec | 1 | Katie deposited \$20 000 cash as capital into the business's bank account. |
| | 2 | Purchased stock of 20 home gyms and paid cash to ABC Ltd. |
| | 3 | Credit sale of 10 home gyms to Brisbane Boys' School Rowing Department, Kangaroo Point. |
| | 4 | The credit sale to Brisbane Boys' School on 3 December is in error. Only eight home gyms were sold in this transaction. |
| | 6 | Cash paid Direct Mail for advertising – \$100. |
| | 7 | Credit sale of one home gym to Ms Emily Lucas of Paddington. |
| | 10 | The entry on 6 December is in error. The advertising expense was \$140. |
| | 11 | Ms Lucas paid cash to settle her account. Cheque 111222, Paddington branch of Westpac. |
| | 30 | Bank statement revealed that Ms Lucas's cheque was dishonoured. |

You are required to print all journals for December.

★ 15.25 **Common transactions with balance-day adjustments**

Wayne Cox began business as a personal trainer on 1 June 2010. The following transactions occurred in his first month of business:

- | | | |
|------|----|---|
| June | 1 | Wayne deposited \$1 000 cash as capital into a bank account. |
| | 3 | Service fees revenue received in cash \$400. |
| | 6 | Paid cash for advertising in <i>Yellow Pages</i> \$150. |
| | 7 | Purchased a mobile phone – \$600 cash from the Phone Zone. |
| | 8 | Paid cash for motor vehicle expenses – \$130; BP, Browns Plains. |
| | 10 | Service fees revenue received in cash \$800. |
| | 12 | Purchased office supplies – \$400 on credit from Officeworks. |
| | 14 | Billed a client, J Lawrie, for fortnightly services. Payment is due in seven days – \$200. |
| | 15 | Paid an annual insurance premium (\$1 320) to Allbrand Insurance Pty Ltd. |
| | 18 | Service fees revenue received in cash \$700. |
| | 20 | Paid Officeworks account in full. |
| | 21 | Received cash of \$200 from J Lawrie in payment of account. |
| | 23 | Purchased a computer and other office equipment on credit from Harvey Norman Pty Ltd \$6 500. |
| | 26 | Wayne withdrew \$750 cash. |
| | 27 | Service fees revenue received in cash – \$1 200. |
| | 28 | Paid cash for motor vehicle expenses – \$155; BP, Browns Plains. |
| | 29 | Purchased fitness equipment from Elite Pty Ltd. Paid cash – \$1 500. |
| | 30 | Wrote a cheque – \$100 to pay for personal expenses. |

Balance-day adjustments are required for:

- service fees revenue owing \$980
- service fees revenue received in advance \$240
- insurance paid on 15 June 2010
- telephone expenses accrued – \$160.

- a Prepare computerised accounting records to record Wayne's transactions for June.
- b Prepare adjustment entries to record the necessary balance-day adjustments.
- c Print an income statement and balance sheet as at 30 June 2010.

★ 15.26 Balance-day adjustments and rollover

On 1 June 2010, Becky Pitt commenced business. She deposited \$120 000 into the business's bank account.

The following are the transactions for her business for the month of June 2010:

- | | | |
|------|----|---|
| June | 1 | Paid Bayside Rental Properties \$1 200 for rent in advance for four months. |
| | 4 | Paid Telstra \$440. Of this amount, \$110 was for the set-up of the system and \$330 was for rental in advance for three months. |
| | 15 | Received \$200 commission from IMU Ltd. |
| | 25 | Paid \$500 to The Office for supplies of stationery. |
| | 30 | The following balance-day adjustments are required: |
| | | <ul style="list-style-type: none"> • Adjust for the rent paid in advance. • Telephone line rental paid in advance is \$200. • \$100 of the commission received is for the period 1–15 July. • \$400 worth of stationery is still on hand. • Accrued electricity expense is \$66. |

Perform a rollover into the next accounting period and prepare reversing entries in the new accounting period. Print a trial balance before and after the rollover.

★ 15.27 Balance-day adjustments and rollover

Record the following transactions for Christopher Small Enterprises for the month of June 2010:

- | | | |
|------|----|--|
| June | 1 | Christopher deposited \$50 000 as capital into a bank account for the business. |
| | | Bought vehicle for cash \$30 000 from ABC Ltd. |
| | 2 | Services performed for Yi-ju Chen amounted to \$600. |
| | 10 | Paid Telstra \$300 for telephone rental and call charges. |
| | 15 | Received \$400 cash from tenants for rent. |
| | 28 | Received notification that Yi-ju Chen had been declared a bankrupt and therefore wrote off this account as a bad debt. |
| | 30 | The following balance-day adjustments are required in the books of Christopher Small Enterprises: |
| | | <ul style="list-style-type: none"> • telephone expense is prepaid \$100 • rent revenue received in advance is \$200 • wages owing at balance day amount to \$500. |

- a** Print a trial balance for June.
- b** Print an income statement and balance sheet.
- c** Perform a rollover into the next period and prepare reversing entries.

★★ 15.28 Consolidation

Your business, Power News, an office stationery business, has moved premises as from 1 January 2010 to 1110 Gympie Road, Chermshire 4032. Power News also acts as a dry cleaning agency for Chris Grant Dry Cleaners. You will be computerising all accounting records for the business from this date.

Credit terms:

You sell on credit to approved customers and your terms are net 30 days.

STOCK LIST

Stock no.	Description	Unit	Selling price \$
001	A4 manilla folders	each	0.30 + GST
002	A4 bond paper	ream	4.50 + GST
003	Nikko finepoint pens	box	5.00 + GST

January 1: At the commencement of business at the new premises, you had the following assets and liabilities: cash \$14 100, shop fittings \$10 000, accounts receivable: B Gordon \$110, loan from ANZ Bank \$16 200, capital \$8 000, GST collected \$10.

January 2: The following invoices were received:

Superb Stationery Supplies 1100 Creek Road, Mt Gravatt 4122			
Tax Invoice No. 8214		Order No. 001	
Date	2 January 2010		
Sold to	Power News 111 Gympie Road CHERMSSIDE 4032		
50 Reams A4 bond paper @ \$2.10 per ream			105.00
Invoice Total			+ GST 10.50
			<u>\$115.50</u>

Gotch & Graham Ipswich Road MANSFIELD 4122			
Date	2 January 2010	Tax Invoice No.	612341
Sold to	Power News 111 Gympie Road CHERMSSIDE 4032	Order No.	002
Description		Qty	Unit Price \$
			Total Amount \$
Nikko finepoint pens	20 boxes	2.75	55.00
A4 manilla folders	1 000	0.20	200.00
			+ GST 25.50
			<u>\$280.50</u>

January 4: Invoices issued were:

Power News The leader in office stationery 1110 Gympie Road, Chermside 4032			
Date	4 January 2010	Tax Invoice No.	01
Sold to	Southside Sellers 898 Toohey Road TARRAGINDI 4121	Order No.	888
Description		Qty	Unit Price Total Amount
			\$ \$
002	A4 bond paper	30 reams	4.50 135.00
003	Nikko finepoint pens	4 boxes	5.00 20.00
			+ GST 15.50
			<u>\$170.50</u>

Power News The leader in office stationery 1110 Gympie Road, Chermside 4032			
Date	4 January 2010	Tax Invoice No.	02
Sold to	Northway Office Supplies Lutwyche Road LUTWYCHE 4030	Order No.	5555
Description		Qty	Unit Price Total Amount
			\$ \$
001	A4 manilla folders	200	.30 60.00
			+ GST 6.00
			<u>\$66.00</u>

January 5: Cash sales as per cash register dockets were:

Power News Stationery	
CASH SALE – TAX INVOICE	
Date:	5 JAN 2010
Stock #:	003 PENS
	2 BOXES @ \$5.00
	\$10.00
	+ GST 1.00
TOTAL:	<u>\$11.00</u>

Power News Stationery	
CASH SALE – TAX INVOICE	
Date:	5 JAN 2010
Stock #:	001 A4 FOLDERS
	50 @ \$0.30
	\$15.00
	+ GST 1.50
TOTAL:	<u>\$16.50</u>

January 6: Cheques drawn were:

06/01/10	
To	Gotch & Graham \$280.50 (Supplier)
For	Account
000498	

06/01/10	
To	Telstra \$176.00
For	Telephone installation (including GST)
000499	

January 7: Receipts issued were:

Power News Stationery		
	Date	07/01/10
	Receipt No.	1
Received from Northway Office Supplies		
The sum of sixty-six dollars for goods on account		
\$66.00		

Power News Stationery		
	Date	07/01/10
	Receipt No.	2
Received from Chris Grant Dry Cleaners		
The sum of one hundred and ninety-two dollars and fifty cents for Commission for operation of dry cleaning depot		
\$192.50 (inclusive of GST)		

January 8: Received notification that B Gordon has been declared bankrupt. Write off B Gordon's outstanding account as a bad debt.

January 9: Sold \$3 300 worth of shop fittings on credit to B Seeto (at cost). Bought new shop fittings as detailed in the invoice below:

Super Cheap Shopfitters Pty Ltd 999 Sandgate Road, Albion 4010				
			Tax Invoice No.	543
			9 Jan 2010	
Sold to	Power News 1110 Gympie Road CHERMSIDE 4032			
Order No.	003			
Code	Description	Qty	Unit Price	Total Amount
			\$	\$
9090	Shop Fittings + GST			4 400
			Total	\$4 400

You are required to print:

- a** a trial balance for January
- b** an income statement for January
- c** a balance sheet.

★★★ 15.29 The complete accounting process

You own a shoe business called Your Surname Shooz located at Shop 6A, Level 2, Brisbane Arcade, Brisbane 4000. You have decided to implement a computerised accounting system using the following information:

- GST must be added to the cost price listed when goods are purchased.
- The shoe store chart of accounts is to be used (if available in package).
- Selling price mark-up is 100% on the cost price (without GST) and then GST must be added to the selling price.
- Shoe laces are considered to be accessories, and sales are to be recorded separate from shoe sales.

At 1 June 2010, the business had the following balances:

	\$
Capital	79 100
Cash at bank	11 220
Merchandise inventory	3 992
Accounts receivable	840
GST paid	186
Provision for doubtful debts	42
Buildings	62 000
Office equipment	2 300
Accounts payable	1 210
GST collected	186

Inventory information as at 1 June 2010:

Item name	Item no.	Cost price	Selling price	Unit of measure	Quantity on hand
Style A – Size 6	01	59.00		pair	4
Style A – Size 7	02	59.00		pair	8
Style A – Size 8	03	59.00		pair	5
Style A – Size 9	04	59.00		pair	5
Style A – Size 10	05	59.00		pair	2
Style B – Size 6	06	69.00		pair	3
Style B – Size 7	07	69.00		pair	5
Style B – Size 8	08	69.00		pair	7
Style B – Size 9	09	69.00		pair	4
Style B – Size 10	10	69.00		pair	5
Style C – Size 6	11	40.00		pair	6
Style C – Size 7	12	40.00		pair	5
Style C – Size 8	13	40.00		pair	6
Style C – Size 9	14	40.00		pair	2
Style C – Size 10	15	40.00		pair	4

Accounts receivable details as at 1 June 2010:

Customer name	Balance \$
H Beecroft	210
T Sawyer	430
Shoes Galore	200

Accounts payable details as at 1 June 2010:

Vendor name	Balance \$
Shoes R Us	850
Footloose Shoes	360
Candice Shoes	Nil

Transactions for the month of June were as follows:

- June 1 Paid Perfection Press \$245 for stationery.
Paid Suncorp for insurance \$660.
- 3 Purchased inventory on credit from Footloose Shoes. There was a freight charge of \$10.
5 Style B – Size 7
3 Style B – Size 9
1 Style B – Size 10
- 5 Paid \$500 to Shoes R Us.
Cash sales:
2 Style C – Size 8
1 Style A – Size 10
2 Style B – Size 7
- 6 The entry for stationery on 1 June was found to be in error. The correct amount was \$254.
Returned two Style B – Size 7 shoes purchased on 3 June to Footloose Shoes.
- 7 Paid wages of \$320.
- 9 Received a cheque from H Beecroft in settlement of account.
- 10 Sold inventory to Shoes Galore on credit:
2 Style A – Size 9
1 Style B – Size 7
1 Style B – Size 8
2 Style C – Size 9
1 Style C – Size 10

- 12 Bought a cash register from Precision Office Equipment for \$1 200 cash.
- 14 Paid wages of \$320.
- 16 Shoes Galore returned one Style C – Size 10 pair of shoes that was sold on 10 June.
- 17 Cash sales:
 - 2 Style A – Size 6
 - 3 Style B – Size 8
 - 4 Style C – Size 7
- 18 Paid Footloose Shoes the amount owing at 1 June 2010.
Increased the selling price of Style B shoes by 10%.
Purchased two dozen pairs of shoe laces from Shoe Accessories Plus for \$10 per dozen (selling price \$2.50 a pair).
- 19 Purchased the following inventory items from Candice Shoes for cash:
 - 3 Style B – Size 7
 - 2 Style A – Size 6
- 21 Paid wages of \$320.
Received a cheque from T Sawyer for \$300. The balance of this account is to be written off as a bad debt.
- 23 Sold the following shoes to H Beecroft on credit:
 - 2 Style A – Size 7
 - 2 Style B – Size 10
- 24 One Style A – Size 6 pair of shoes was returned. The sale took place on 17 June.
- 26 Paid the full amount owing to Shoes R Us.
- 28 Paid wages of \$320.
Sold one pair of shoe laces for \$2.50 cash.
- 30 Bought a motor vehicle on credit from Ace Motors for \$22 000.

The following balance-day adjustments need to be recorded:

- Insurance paid on 1 June was for a year and wages owing \$128.
- Write off depreciation: office equipment \$200, building \$5 000.
- A stocktake revealed two items of Style B size 10 missing and one of Style A size 6 missing.
- Provision for doubtful debts is to be 2.5% of total receivables balance.

You are required to print:

- a income statement for June
- b balance sheet
- c list of inventories.

★★★ 15.30 The complete accounting process

Kieran Anthony wishes to convert to a computerised system on 1 June 2010. He sells computer supplies to schools under the business name KA Computer Supplies. The following account balances need to be entered into an accounting package on 1 June 2010:

- cash \$63 000
- equipment \$15 000
- accounts receivable:
 - Bayside Independent – \$4 580
 - Trinity SHS – \$998
- inventories:
 - Item 1 State of the Art Mice 300 @ \$34 each (retail \$57 each + GST)
 - Item 2 Flat screens 130 @ \$210 each (retail \$460 each + GST)
 - Item 3 (Ergonomic keyboards) 82 @ \$19 each (retail \$32 each + GST)
- GST collected \$507.10
- Bank loan – \$20 000

Enter the following transactions for the month of June:

- June 1 Purchased a delivery vehicle for the business for cash \$14 500 from ABC Ltd.
 4 Sold 20 of item 1 to Northside Grammar School.
 6 Purchased 10 of item 2 from Computer Wholesalers \$210 each plus GST.
 Paid Telstra \$390 for new telephone line and modifications.
 Sold 50 of item 1, 10 of item 2, and 10 of item 3 to Caloundra School.
 7 Northside Grammar School returned three of item 1 purchased on 4 June, as they were surplus to requirements. Issued an adjustment note.
 8 Kieran withdrew one of item 2 for own use at home.
 9 Sold 12 of item 1 and 10 of item 2 on credit to Sutton Beach SHS.
 Sold the following inventory items for cash to Townsville Catholic College – 10 of item 1 and 10 of item 3.
 10 Returned one of item 2 purchased on June 6 from Computer Wholesalers, as the items were damaged. Received an adjustment note.
 11 Northside Grammar School paid its outstanding account.
 15 Paid Computer Wholesalers' account in full.
 16 Kieran Anthony contributed a further \$10 000 to the business.
 The entry on 9 June that recorded a credit sale was incorrect. Reverse the entry. The sale was actually made to Stuart Park SHS.
 18 Received \$126 commission from Computer Press Books.
 26 Townsville Catholic College returned one of the keyboards (item 3). It had a damaged container. Gave a cash refund.
 28 K Anthony withdrew cash of \$4 000 for own use.
 30 Received notification that Bayside Independent School was declared bankrupt. This account is to be written off as a bad debt.
 Depreciation on the vehicle is to be calculated for the month using the reducing balance method at a rate of 25%.
 Received a bank statement from the Business Bank of Brighton, which upon comparison with our records showed that the last three cheques written had not been deposited. The following charges appeared: tax of \$5.90 and account keeping fees of \$6.30. Payments on the loan are deducted from this account and during the month a total of \$1 300 was deducted, representing \$1 000 off the principal and \$300 interest on the loan.

The following balance-day adjustments are necessary:

- wages owing for the month \$3 800
- commission revenue owing \$200
- telephone expenses were \$170 in advance for rental for the next two months
- provision for doubtful debts to be 2% of final balance of receivables.

a You are required to prepare the following end-of-period reports:

- bank reconciliation statement
- trial balance prior to balance-day adjustments
- trial balance after all adjustments have been completed
- inventory item list in summary
- GST report (accrual basis)
- income statement
- balance sheet.

b Save the data file.

c Rollover to a new accounting period.

d Prepare reversing entries on the first day of the new accounting period.

★★★ 15.31 The complete accounting process

You start your own merchandising business on 1 June 2010. It is called Your Surname Trading and retails clocks. You have decided to implement a computerised accounting system using *MYOB* or *QuickBooks*.

You contribute the following assets to the business:

Cash at bank	\$25 000
Office equipment	11 500

You make the following management decisions before beginning the business:

- Selling prices: item 1 \$18.00, item 2 \$64.00, item 3 \$36.00.
- Credit is given to approved trade customers.
- Depreciation on office equipment, and furniture and fittings is to be charged at a rate of 10% using the straight line method.

Assume that the residual value of assets is \$0. Assume that all figures are inclusive of GST where appropriate.

Transactions for the month of June are as follows. All transactions include GST.

- June 1 Paid Optus \$330 for connection of telephone service.
Purchased furniture and fittings on credit from AA Mart for \$5 900. Paid a deposit of \$1 000, with the remainder to be paid on delivery of the items.
Paid rent and a bond of \$2 860 to North Coast Rentals.
- 4 Purchased inventories from Carey & Co. on credit:
Item 1: 40 x digital clocks @ \$9 each
Item 2: 30 x analogue clocks @ \$32 each
Item 3: 60 x novelty clocks @ \$18 each
- 7 Notified Carey & Co. that five of item 3 were broken on delivery. Carey & Co. sent an adjustment note to the value of the broken goods.
Paid Telltheworld Pty Ltd \$900 for advertising.
Paid insurance of \$330 to Always There Insurance Co.
Furniture and fittings from AA Mart were delivered. Wrote cheque to pay remainder of account.
- 10 Sold goods for cash: five of item 3, six of item 2 and nine of item 1.
You decided to withdraw cash as a wage \$500 (no GST).
Telltheworld Pty Ltd advised that we had paid the account incorrectly. The amount owing for advertising for three months as contracted was \$660, not \$900 as paid. Reverse the cheque and draw another in payment of the account.
- 14 Sold the following items on credit to a trade customer, AJ Ltd: 10 of item 1, 10 of item 2, 10 of item 3.
- 18 Paid Energon for electricity \$540. Of this amount, \$240 was for your own residence; the remainder was for the business.
Paid Carey & Co. the full amount owing.
- 19 Cash sales for the past week: six of item 1; four of item 2, 12 of item 3.
Withdrew cash as a wage \$500.
One of item 2 sold on 10 June was returned and a cash refund made.
- 20 Purchased goods from a new supplier, Clocks We R Ltd, for cash:
20 x item 1 @ \$ 7.50 each
30 x item 2 @ \$28.00 each
20 x item 3 @ \$18.00 each
- 22 Cash sales for the past week: six of item 1; four of item 2; 12 of item 3.
- 29 Cash sales: 12 of item 1; 14 of item 2; 22 of item 3.
- 30 Write off depreciation for the month on the assets held.

Balance-day adjustments are required for the following:

- advertising paid in advance for two months
- commission revenue owing for the month of \$800 (exclusive of GST)
- rent owing for two weeks \$500
- a stocktake reveals that one of item 3 is broken and two of item 1 are missing, presumed stolen
- provision for doubtful debts to be 5% of accounts receivable balance on 30 June.

The following bank statement was received on 30 June. (Any errors found are to be treated as errors in the bank's records.)

Trustus Bank
300 Queen Street, Brisbane
Bank statement as at 30 June 2010

Date	Details	Debit \$	Credit \$	Balance \$
June 1	Deposit		25 000.00	25 000.00 Cr
	Chq book charges	5.00		24 995.00 Cr
5	Chq 0001	330.00		24 665.00 Cr
9	Chq 0005	330.00		24 335.00 Cr
	Chq 0002	1 000.00		23 335.00 Cr
	Interest		7.00	23 342.00 Cr
10	Deposit		1 089.00	24 431.00 Cr
	Chq 0007	500.00		23 931.00 Cr
	Chq 0003	2 860.00		21 071.00 Cr
14	Chq 0008	660.00		20 411.00 Cr
19	Deposit		796.00	21 207.00 Cr
	Chq 0009	540.00		21 667.00 Cr
23	Chq 0010	2 310.00		19 357.00 Cr
	Acc fees	12.50		19 344.50 Cr
	Taxes	4.30		19 340.20 Cr

You are required to complete the following as at 30 June 2010 (unless otherwise stated):

- a** trial balance prior to adjustment and bank reconciliation
- b** bank reconciliation statement
- c** inventory items summary after adjustments
- d** GST summary for June (accrual basis)
- e** trial balance after adjustments and bank reconciliation
- f** income statement
- g** balance sheet
- h** back up the data file and rollover into the next accounting period
- i** trial balance as at 1 July 2010
- j** reversing entries in the general journal as at 1 July 2010.

★★★ 15.32 Customising reports/exporting to Excel/ratios

- a** Retrieve the file created in exercise 15.30 for Kieran Anthony's business before the rollover. Reprint the balance sheet after customising it in the following manner:
 - i** change the fonts used in the report
 - ii** introduce classifications for current and non-current assets and liabilities.
- b** Export the balance sheet into a spreadsheet application and calculate the following ratios using the figures in the statement:
 - i** working capital ratio (current assets/current liabilities)
 - ii** equity ratio (owner's equity/total assets)
 - iii** debt ratio (total liabilities/total assets).

★★★ 15.33 Interpretation of computer-generated reports

Interpret the following extract from the books of Fento's Furniture Store. Recreate the transactions that occurred to require the following entries to be made for this business.

Src	Date	ID no.	Acct no.	Account name	Debit	Credit
SJ	04-09-10	Sale; Leisure Lane Nursery				
		00000021	1-1300	Trade Debtors	\$426.14	
		00000021	1-1300	Trade Debtors	\$42.61	
		00000021	4-1300	Sales – Indoor Furniture		\$150.00
		00000021	4-1400	Sales – Outdoor Furniture		\$276.14
		00000021	2-1310	GST Collected		\$42.61
		00000021	5-1100	Cost of Sales	\$136.50	
		00000021	1-1400	Inventory		\$136.50
CR	15-09-10	Leisure Lane Nursery for 00000021				
		CR000011	1-1110	Cheque Account	\$350.00	
		CR000011	1-1300	Trade Debtors		\$350.00
CD	15-09-10	Alan Long				
		31	1-1190	Electronic Clearing Account		\$591.45
		31	6-3100	Wages & Salaries	\$650.56	
		31	6-3100	Wages & Salaries	\$155.00	
		31	2-1530	Superannuation Payable		\$15.00
		31	2-1540	Union Fees Payable		\$12.08
		31	2-1510	PAYG Withholdings Payable		\$187.03
PJ	15-09-10	Purchase; Golden Sands Fabrics				
		00000051	2-1200	Trade Creditors		\$898.77
		00000051	2-1200	Trade Creditors		\$89.88
		00000051	1-1400	Inventory	\$898.77	
		00000051	2-1320	GST Paid	\$89.88	
CD	19-09-10	AMMMI Ltd				
		32	1-1110	Cheque Account		\$89.75
		32	6-2130	Insurance	\$81.59	
		32	2-1320	GST Paid	\$8.16	
PJ	19-09-10	Purchase; G Storie Furniture				
		00000052	2-1200	Trade Creditors		\$2,706.64
		00000052	2-1200	Trade Creditors		\$270.66
		00000052	1-1400	Inventory	\$2 706.64	
		00000052	2-1320	GST Paid	\$270.66	
CR	21-09-10	Payment; T B Booker Ltd				
		CR000012	1-1110	Cheque Account	468.75	
		CR000012	1-1300	Trade Debtors		468.75
CD	27-09-10	Kenmore Real Estate				
		33	1-1110	Cheque Account		\$465.00
		33	6-2140	Office Rental	\$422.73	
		33	2-1320	GST Paid	\$42.27	
SJ	27-09-10	Sale; Cash Sales				
		00000022	1-1300	Trade Debtors	\$65.91	
		00000022	1-1300	Trade Debtors	\$6.59	
		00000022	4-1300	Sales – Indoor Furniture		\$50.00
		00000022	4-1400	Sales – Outdoor Furniture		\$15.91
		00000022	2-1310	GST Collected		\$6.59
		00000022	5-1100	Cost of Sales	\$36.99	
		00000022	1-1400	Inventory		\$36.99
CR	27-09-10	Cash Sales for 0000002				
		CR000013	1-1110	Cheque Account	\$72.50	
		CR000013	1-1300	Trade Debtors		\$72.50

CD	29-09-10	Amy Pepper				
		34	1-1190	Electronic Clearing Account		\$474.60
		34	6-3100	Wages & Salaries	\$645.30	
		34	2-1530	Superannuation Payable		\$25.00
		34	2-1540	MBF Health Payable		\$9.68
		34	2-1510	PAYG Withholdings Payable		\$136.02
CD	30-09-10	G Storie Furniture				
		35	1-1110	Cheque Account		\$2,977.30
		35	2-1200	Trade Creditors	\$2 977.30	
CD	30-09-10	Kenmore BP				
		36	1-1110	Cheque Account		\$225.00
		36	6-2100	Motor Vehicle Expenses	\$204.55	
		36	2-1320	GST Paid	\$20.45	

Account is used to record all changes regarding an item. They act as a summary device.

Accounting is the process of identifying, measuring, interpreting and communicating financial and other information to interested parties.

Accounting entity assumption presumes that a business enterprise (entity) has an existence separate from the private financial affairs of its owner/s.

Accounting equation is an expression of the relationship between assets, liabilities and owner's equity.

Accounting period assumption divides the life of an enterprise into arbitrary time periods.

Accounting standards are rules, practices and procedures with which members of the accounting bodies must comply.

Accounts payable control account summarises all information pertaining to accounts payable. It is a liability account.

Accounts payable subsidiary ledger records all individual accounts payable accounts.

Accounts receivable control account summarises all information pertaining to accounts receivables. It is an asset account.

Accounts receivable subsidiary ledger records all individual accounts receivable accounts.

Accrual accounting recognises transactions and events when revenues are earned and expenses are incurred.

Accrued expenses are costs incurred by a business in the current accounting period that have not yet been paid.

Accrued revenues are revenues that have been earned in the current financial period but not yet received.

Accumulated depreciation is the aggregate of the depreciation expenses at a given point in time made in respect to a particular asset.

Aged analysis of accounts receivable is a list of accounts receivable balances classified according to the time period the debt has been outstanding.

Assets are items of value that are owned by a business.

Assumptions are concepts, rules or regulations that are established standards on which all other decision-making in accounting is based.

Awards are a legally binding order that sets out the minimum rates of remuneration and conditions of employment under which employees work in a particular industry.

Bad debts is an accounts receivable's outstanding balance, which it is deemed will not be received.

Balance-day adjustments are general journal entries made as at balance day in order to compare (match) the revenues and expenses accurately so that the profit (loss) can be determined.

Balance sheet is a financial report that shows the balances of all asset, liability and owner's equity accounts at a particular point in time.

Bank overdraft is a negative balance in the business's account held with a bank.

Bank reconciliation statement brings into agreement the balance of the business's bank account with the bank's records of the business's account after all outstanding transactions have been taken into consideration.

Bank statement shows the bank's record of the cash held by a business with the bank. It lists the deposits, withdrawals and balance of the business's bank account over a stated time period.

Batching refers to the process of entering data in batches rather than individually. For example all the cash received from debtors over one day may be batched into the system at the same time. This means that one module is being access at a time.

Breakthrough analysis calculates the breakeven point where sales equals costs.

Budget is a forecast of future events expressed in quantitative terms.

Business transaction is a financial event that affects the elements of the accounting equation.

Capital expenditure is any significant cost that increases the value of a non-current asset.

Cash is any form of money which can be exchanged for goods and services and is readily accepted by banks. It includes notes, coins, cheques, money orders and electronic transfers.

Cash budget is internal control that forecasts the expected receipts, expected payments and anticipated cash position of a business over a period of time.

Cash flow is cash movement resulting from transactions with parties external to the entity.

Cash flow adequacy ratio indicates the ability of an enterprise to generate cash to cover immediate cash obligations.

Cash flow ratios focus on the sufficiency of cash to cover cash flow needs and the efficiency of the enterprise to generate cash.

Cash flow statement is a financial report that indicates the movement of cash receipts and payments resulting from transactions with parties outside the enterprise over a given period of time.

Cash flow to revenue ratio indicates the entity's efficiency in converting revenue based on accrual sales and other revenue.

- Cash payments journal** records all payments made by a business. It classifies like items together and acts as an aid for posting to the ledger by analysing the transactions into their debit and credit components.
- Cash receipts journal** records the receipt of cash (in any form) by the business. It classifies like items together and acts as an aid for posting to the ledger by analysing the transactions into their debit and credit components.
- Chart of accounts** is a list of accounts, grouped together according to their account classification, with each account having a unique number.
- Collateral** is any item owned by a person that can be offered as security against borrowings.
- Company** is the term given to an artificial legal body that has legal rights, duties and powers. It must comply with the Corporations Act 2001.
- Comparative financial statements** show the income statements and balance sheets of a business for two or more years.
- Contribution margin** is sales less variable costs.
- Control accounts** are general ledger accounts that summarise like transactions in individual subsidiary ledger accounts.
- Cost of goods sold** refers to the expense to a business of purchasing goods, converting them into a saleable condition and transporting them to the location of sale.
- Credit transactions** (sale or purchase) involve an agreement that payment will be made at a later time.
- Current ratio** measures the ability of the enterprise to meet its short-term financial obligations; that is, commitments due in the current financial year.
- Debentures** are legal documents issued by a corporation acknowledging the indebtedness of the corporation for a fixed period of time at a fixed rate of interest. Debentures are secured by a corporation's assets.
- Debt financing** occurs when a corporation raises money through borrowings from people or institutions outside the entity.
- Debt ratio** indicates the way in which the business is financed and the extent of the firm's borrowings in relation to its assets.
- Depreciation** (amortisation) is the allocation of the cost of the asset to the accounting periods in which it is expected that the asset will contribute to the production of revenue.
- Disposal account** is a working account that contains all the information regarding the asset to be disposed of and facilitates the calculation of a gain (loss) on disposal.
- Double entry** means that when a transaction is recorded, total debits for that transaction must equal total credits for the transaction.
- Doubtful debts account** records debts that are unlikely to be collected. It ensures that the matching principle is applied in the current accounting period.
- Earning capacity** of a business (profitability) is the ability to earn income within the present financial structure of the enterprise.
- E-business** is the use of electronic telecommunications to engage in the exchange of products and services.
- Effectiveness of management policies** is a measurement of how successful managers have been in directing and maintaining the set policies of an enterprise.
- Employee files** must record relevant personal and work-related information.
- Equity financing** occurs when money is raised by increasing the investment of the owner/s in the business through share issues.
- Equity ratio** indicates the extent to which the owner has financed the business's assets, as opposed to using an alternative source of finance – borrowings (debt).
- Expenses** are the costs incurred in the earning of revenue.
- Expenses to sales ratio** indicates the amount of the sales dollars needed to cover expenses (or the particular category of expenses).
- FIFO (First In First Out) method** of costing inventories is based on the assumption that the oldest inventories are sold first.
- Financial flexibility** indicates the ability of an enterprise to adapt its financial commitments to unexpected needs and circumstances.
- Financial reports** are classified summaries of an enterprise's financial standing, expressed in monetary terms and used in decision-making.
- Financial stability** refers to the short-term liquidity and long-term solvency of an enterprise.
- Fixed costs** remain the same as the level of activity changes.
- Forensic accounting** means using investigative, accounting and business skills to gather information and opinions about business activities that involve misappropriation of the assets of a business in some manner by internal or external parties. This information and/or opinion is then relied on as evidence to be used in legal proceedings either in an independent expert report (IER) or by the forensic accountant appearing as an expert witness or both.

Function of financial reports is to communicate information to users in order to facilitate the decision-making process.

General journal is a means of recording transactions that occur in a business. It records the accounts affected and the necessary double entry that must take place in the accounting system in readiness for further steps in the accounting process.

General ledger is a record of all the accounts of a business.

Going concern (continuity) assumption refers to the fact that accounting reports are prepared under the premise that the entity will continue to operate in the foreseeable future.

Gross loss occurs when the cost of the goods sold is greater than the net sales revenue.

Gross pay is the total amount of an employee's earning before any deductions are calculated.

Gross profit occurs when net sales revenue is greater than the cost of the goods sold.

Gross profit ratio indicates the ability of a trading enterprise to generate gross profit from sales.

Hire purchase is a legal contract that allows the hirer (purchaser) to use the asset while making regular (usually monthly) payments. Ownership of the goods is transferred to the hirer at the time the contract conditions have been fulfilled.

Historical cost (objectivity) assumption refers to the recording of items at their original purchase price.

Horizontal analysis is a technique used to analyse items and/or groups of items in consecutive financial periods.

Imprest amount is an advance from the bank account to the petty cash fund.

Income statement is a report that details all the expenses and revenues of a business and calculates the resultant profit (loss) for the period.

Income tax instalment is the estimated amount of income tax that an employee must pay on gross earnings per pay period.

Inflation is an increase in the general level of prices and is measured by the percentage change in the consumer price index between the current and previous periods.

Interest is commercial compensation based on the time value of money.

Internal controls safeguard the assets of a business through the implementation of administrative and accounting procedures.

Inventories are items held by the business that are intended for sale in the normal operations of the business.

Inventory record (stock card) is a record of every movement of stock in and out of a business for a particular stock item. It is recorded at cost price.

Journals are books in which transactions of the same type are entered (recorded).

Lease is a rental agreement in which the lessee (the renter) has the use of an asset and agrees to pay a rental fee to the lessor (the asset owner).

Liabilities are amounts that a business owes to other people or organisations.

Limited liability restricts the obligation of the investor in the event of liquidation, to the full extent of their investment in the company (that is, the total value of their shareholding).

Long-term debt payment ratio indicates an enterprise's ability to make its long-term contractual payments.

Monetary assumption assumes that all transactions can be recorded in money terms.

Net profit occurs when gross profit (loss) and other operating revenues are greater than other operating expenses.

Net profit ratio indicates the ability of the enterprise to generate net profit from sales of goods/services.

Net realisable value is the estimated proceeds of sale less, where applicable, all further costs to the stage of completion and less all costs to be incurred in marketing, selling and distribution to customers.

Non-current assets are economic resources that will not be used up or converted into cash within the normal yearly operating cycle of the business.

Owner's equity is the value of any investment the owner has made in the business.

Payroll encompasses all the expenses associated with the wages and salaries of a business.

Payroll register (or wages sheet) is a detailed summary of a business's payroll for a given pay period.

Period costs are non-product costs incurred but not directly required to produce a particular item of service.

Periodic inventory system is a method of accounting for inventories that requires a physical stock count whenever the value of the closing inventories is required.

Perpetual inventory system is a method of accounting for inventories that keeps a continuous record of all inventories purchased and sold.

Personal financing is the ability of an individual to provide funds in order to achieve personal goals.

Petty cash is a fund established by a business to provide cash to pay for small items of expenditure and to record these cash transactions for control purposes.

Prepaid expenses are the portion of an expense that has been paid by a business in one accounting period but will be incurred (used up) in a future accounting period.

Product costs are all costs involved in the manufacture or provision of a particular good or service.

Profit and loss summary is a working account used to determine the net profit (loss) of a business for the period.

Profitability is the ability of the enterprise to earn income within the present financial structure of the enterprise.

Proprietary company is a privately owned company that complies with sections 112 and 113 of the Corporations Act 2001.

Provision for doubtful debts account records debts that are unlikely to be collected. As a negative asset account, it has the effect of reducing the accounts receivable value in the balance sheet.

Public company is a company that acquires funds by offering shares, notes and bonds to the public.

Purchases journal records all purchases of inventories made on credit.

Qualitative characteristics are those attributes that financial data should possess if it is to be included in financial reports.

Quick ratio indicates the entity's ability to meet its immediate financial obligations such as accounts payable from its immediately accessible or quickly converted assets such as cash and accounts receivable.

Ratio is the number of times one number contains the other number.

Realise revenue means to record revenue in the accounting records when the cash is actually received.

Recognise revenue means to record revenue in the accounting records when it is earned.

Return on equity ratio indicates the return to the owner on the amount invested in the business.

Return on total assets ratio indicates the ability of the enterprise to generate profits using its assets.

Revenue is income earned by a business.

Revenue expenditure is any cost relating to non-current assets that is incurred to maintain, but not to extend, the useful life of the asset.

Risk management is action taken by a person to set risk at a level acceptable to that person in relation to personal finance.

Salary sacrifice is where the employee sacrifices cash in exchange for the employer paying for some other item for the employee.

Sales journal records all sales of inventories made on credit.

Separate legal entity is where a company is treated as a legitimate body in matters pertaining to the law distinct from its owners

Shares are the legal claim on a specific amount of capital of a company

Sole trader is a person who is the only owner of a business.

Source document is evidence that a business transaction has occurred. It is used as the basis for entering information into an accounting system.

Subsidiary ledgers are additional ledgers maintained for the specific purpose of holding all individual accounts receivable or accounts payable accounts.

Trend analysis is a technique used to analyse items and/or groups of items over three or more years.

Trial balance is a list of all active accounts in the general ledger and their working balances at a particular point in time.

Turnover of accounts receivable (average collection period) measures the efficiency of the business in managing its accounts receivable.

Turnover of inventories rate measures how efficiently the inventory of the business is being managed.

Unearned revenues is income that has been received by a business and recorded in the current accounting period but will not be earned until a future accounting period.

Unlimited liability means that the owner of a business is personally responsible (liable) for meeting any debts incurred by the business.

Unsecured notes are documents issued by a corporation acknowledging the indebtedness of the corporation for a fixed period of time at a fixed rate of interest. Unsecured notes have no security offered against the assets of a corporation.

Variable costs change as the level of activity changes.

Vertical analysis is a technique used to analyse items and/or groups of items in the same financial period.

Weighted average costing is a method of assigning the total costs of inventory equally among the total of all like units.

Working balance is the difference between the two sides of a T-format account in the general ledger.

Working capital is the total of all current assets less the total of all current liabilities.

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