MANAGEMENT ACCOUNTING: COSTING

STUDY TEXT

Qualifications and Credit Framework

AQ2016

This Study Text supports study for the following AAT qualifications:

AAT Advanced Diploma in Accounting – Level 3

AAT Advanced Certificate in Bookkeeping – Level 3

AAT Advanced Diploma in Accounting at SCQF Level 6

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INTRODUCTION

HOW TO USE THESE MATERIALS

These Kaplan Publishing learning materials have been carefully designed to make your learning experience as easy as possible and to give you the best chance of success in your AAT assessments.

They contain a number of features to help you in the study process.

The sections on the Unit Guide, the Assessment and Study Skills should be read before you commence your studies.

They are designed to familiarise you with the nature and content of the assessment and to give you tips on how best to approach your studies.

STUDY TEXT

This Study Text has been specially prepared for the revised AAT qualification introduced in September 2016.

It is written in a practical and interactive style:

- Key terms and concepts are clearly defined.
- All topics are illustrated with practical examples with clearly worked solutions based on sample tasks provided by the AAT in the new examining style.
- Frequent practice activities throughout the chapters ensure that what you have learnt is regularly reinforced.
- 'Pitfalls' and 'examination tips' help you avoid commonly made mistakes and help you focus on what is required to perform well in your examination.

ICONS

The chapters include the following icons throughout.

They are designed to assist you in your studies by identifying key definitions and the points at which you can test yourself on the knowledge gained.

Definition

These sections explain important areas of Knowledge which must be understood and reproduced in an assessment.

Example

The illustrative examples can be used to help develop an understanding of topics before attempting the activity exercises.

Test your understanding

These are exercises which give the opportunity to assess your understanding of all the assessment areas.

Quality and accuracy are of the utmost importance to us so if you spot an error in any of our products, please send an email to mykaplanreporting@kaplan.com with full details.

Our Quality Co-ordinator will work with our technical team to verify the error and take action to ensure it is corrected in future editions.

Progression

There are two elements of progression that we can measure: first how quickly students move through individual topics within a subject; and second how quickly they move from one course to the next. We know that there is an optimum for both, but it can vary from subject to subject and from student to student. However, using data and our experience of student performance over many years, we can make some generalisations.

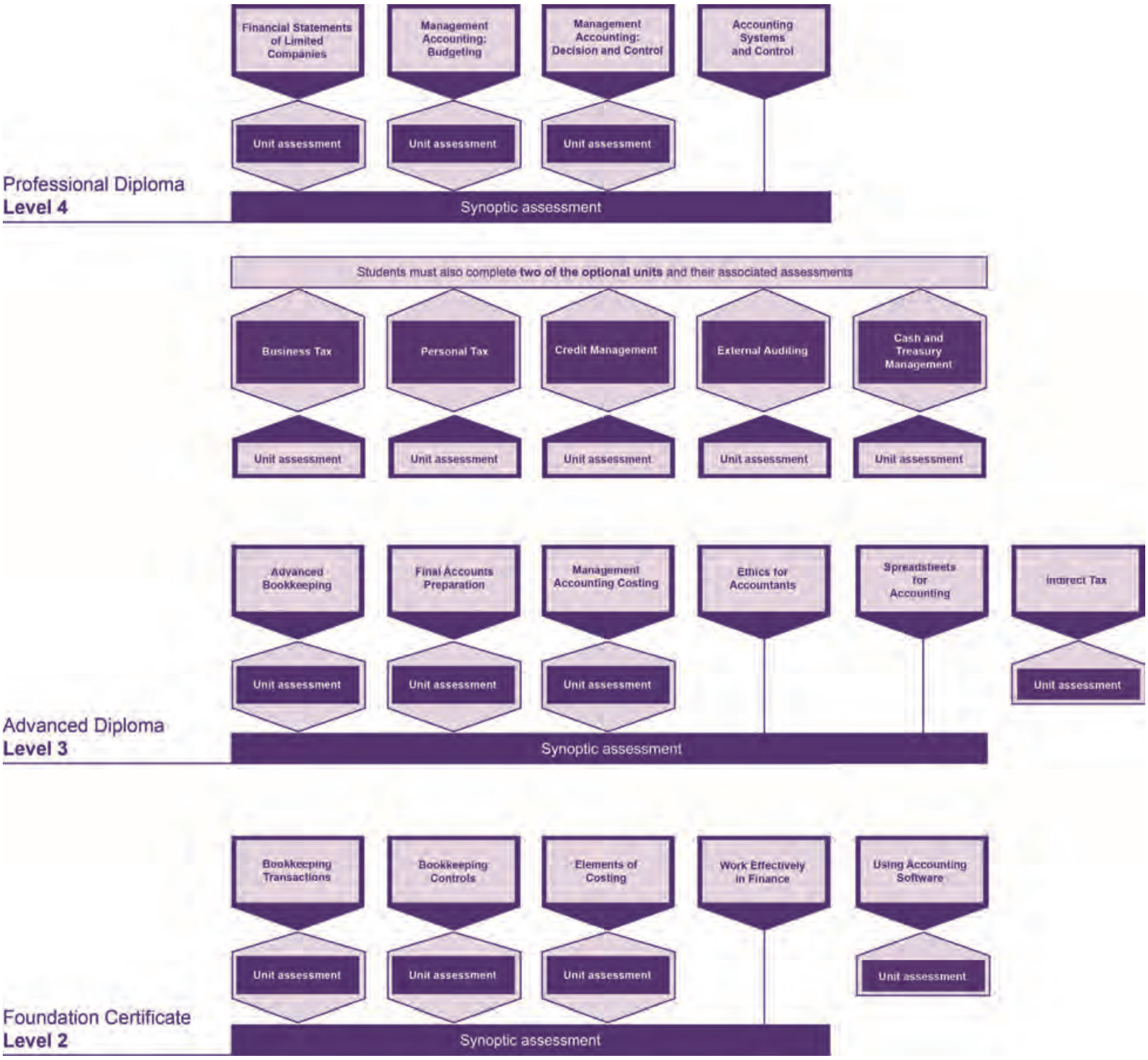
A fixed period of study set out at the start of a course with key milestones is important. This can be within a subject, for example 'I will finish this topic by 30 June', or for overall achievement, such as 'I want to be qualified by the end of next year'.

Your qualification is cumulative, as earlier papers provide a foundation for your subsequent studies, so do not allow there to be too big a gap between one subject and another.

We know that exams encourage techniques that lead to some degree of short term retention, the result being that you will simply forget much of what you have already learned unless it is refreshed (look up Ebbinghaus Forgetting Curve for more details on this). This makes it more difficult as you move from one subject to another: not only will you have to learn the new subject, you will also have to relearn all the underpinning knowledge as well. This is very inefficient and slows down your overall progression which makes it more likely you may not succeed at all.

In addition, delaying your studies slows your path to qualification which can have negative impacts on your career, postponing the opportunity to apply for higher level positions and therefore higher pay.

You can use the following diagram showing the whole structure of your qualification to help you keep track of your progress.



Financial Statements of Limited Companies
Management Accounting: Budgeting
Management Accounting: Decision and Control
Accounting Systems and Control
Unit assessment
Unit assessment
Unit assessment
Professional Diploma
Level 4
Synoptic assessment
Students must also complete two of the optional units and their associated assessments
Business Tax
Personal Tax
Credit Management
External Auditing
Cash and Treasury Management
Unit assessment
Unit assessment
Unit assessment
Unit assessment
Unit assessment
Advanced Bookkeeping
Final Accounts Preparation
Management Accounting Costing
Ethics for Accountants
Spreadsheets for Accounting
Indirect Tax
Unit assessment
Unit assessment
Unit assessment
Unit assessment
Advanced Diploma
Level 3
Synoptic assessment
Bookkeeping Transactions
Bookkeeping Controls
Elements of Costing
Work Effectively in Finance
Using Accounting Software
Unit assessment
Unit assessment
Unit assessment
Unit assessment
Foundation Certificate
Level 2
Synoptic assessment

UNIT GUIDE

Introduction

Management Accounting: Costing provides students with the knowledge and skills needed to understand the role of cost and management accounting in an organisation, and how organisations use such information to aid management decision making. This unit takes students from Elements of Costing at Foundation level and gets them ready to prepare organisational budgets and report on performance at Professional level.

On successful completion of this unit, students should be able to carry out costing procedures in an organisation's accounting department with minimal supervision. They will be able to gather, analyse and report cost and revenue information to support managerial planning, control and decision making.

Students will develop a deeper understanding of the fundamental principles that underpin management accounting methodology and techniques, how costs are handled in organisations, and why different organisations treat costs in different ways. They will be able to recognise different approaches to management accounting and provide informed and reasoned judgements to guide management. They will also learn how to apply these principles and appreciate why effective cost accounting is crucial to any organisation.

Students will learn the techniques required for dealing with direct costs and revenues, and with the treatment of short-term overhead costs. These include: inventory control methods; direct labour costing; allocation and apportionment of indirect costs to responsibility centres; calculation of overhead absorption rates, including under absorptions and over absorptions; and prime, marginal and absorption costing calculations.

They will also learn the techniques required for decision making, using both short-term and long-term estimates of costs and revenues. These include: estimating changes in unit costs and profit as activity levels change; segmented profit or loss by products; break-even (cost volume profit – CVP) analysis; limiting factor decision making; job, batch, unit, process and service costing; reconciling budgeted and actual costs and revenues by means of flexible or fixed budgets; and capital investment appraisal techniques.

This unit builds on the knowledge and skills that students develop at Foundation level in Elements of Costing and prepares them for the Professional level units, Management Accounting: Budgeting and Management Accounting: Decision and Control. Together, these units give students an underpinning understanding of cost and management accounting principles and the ability to apply relevant techniques.

Management Accounting: Costing is a **mandatory** unit in this qualification.

Learning outcomes

On completion of this unit the learner will be able to:

- Understand the purpose and use of management accounting within an organisation.
- Apply techniques required for dealing with costs.
- Apportion costs according to organisational requirements.
- Analyse and review deviations from budget and report these to management.
- Apply management accounting techniques to support decision making.

Scope of content

To perform this unit effectively you will need to know and understand the following:

		Chapter
1	**Understand the purpose and use of management accounting within an organisation**	
1.1	**Demonstrate an understanding of internal reporting** Students need to know: • The purpose of internal reporting and providing accurate information to management. • How to calculate: – Costs, contribution and reported profits for an organisation. – Segmented costs, contribution and reported profits by product.	1, 10
1.2	**Demonstrate an understanding of ethical principles in management accounting** Students need to know: • The need for integrity in preparing management accounts. • Why third parties (such as banks) may also be users of management accounts.	1
1.3	**Critically compare different types of responsibility centres** Student need to know: • The differences in cost and revenue reporting between responsibility centres, which are: – cost centres – profit centres – investment centres – revenue centres.	1

THE ASSESSMENT

Test specification for this unit assessment

Assessment type	Marking type	Duration of exam
Computer based unit assessment	Computer marked	2 hours 30 minutes

Learning outcomes		Weighting
1	Understand the purpose and use of management accounting within an organisation	15%
2	Apply techniques required for dealing with costs	35%
3	Apportion costs according to organisational requirements	19%
4	Analyse and review deviations from budget and report these to management	10%
5	Apply management accounting techniques to support decision making	21%
Total		100%

UNIT LINK TO SYNOPTIC ASSESSMENT

AAT AQ16 introduces a Synoptic Assessment, which students must complete if they are to achieve the appropriate qualification upon completion of a qualification. In the case of the Advanced Diploma in Accounting, students must pass all of the mandatory assessments and the Synoptic Assessment to achieve the qualification.

As a Synoptic Assessment is attempted following completion of individual units, it draws upon knowledge and understanding from those units. It may be appropriate for students to retain their study materials for individual units until they have successfully completed the Synoptic Assessment for that qualification.

With specific reference to this unit, the following learning objectives are also relevant to the Advanced Diploma in Accounting Synoptic Assessment.

LO1 Understand the purpose and use of management accounting within an organisation.

LO2 Apply techniques for dealing with costs.

LO3 Apportion costs according to organisational requirements.

LO4 Analyse and review deviations from budget and report these to management.

LO5 Apply management accounting techniques to support decision making.

STUDY SKILLS

Preparing to study

Devise a study plan

Determine which times of the week you will study.

Split these times into sessions of at least one hour for study of new material. Any shorter periods could be used for revision or practice.

Put the times you plan to study onto a study plan for the weeks from now until the assessment and set yourself targets for each period of study – in your sessions make sure you cover the whole course, activities and the associated Test your knowledge activities.

If you are studying more than one unit at a time, try to vary your subjects as this can help to keep you interested and see subjects as part of wider knowledge.

When working through your course, compare your progress with your plan and, if necessary, re-plan your work (perhaps including extra sessions) or, if you are ahead, do some extra revision/practice questions.

Effective studying

Active reading

You are not expected to learn the text by rote, rather, you must understand what you are reading and be able to use it to pass the assessment and develop good practice.

A good technique is to use SQ3Rs – Survey, Question, Read, Recall, Review:

1 **Survey the chapter**

Look at the headings and read the introduction, knowledge, skills and content, so as to get an overview of what the chapter deals with.

2 **Question**

Whilst undertaking the survey ask yourself the questions you hope the chapter will answer for you.

Management accounting

1

Introduction

This chapter considers the basic principles of management accounting and management information. It contains fundamental principles that the rest of the course is built on.

ASSESSMENT CRITERIA

Demonstrate an understanding of internal reporting (1.1)

Demonstrate an understanding of ethical principles in management accounting (1.2)

Critically compare different types of responsibility centres (1.3)

Differentiate between and apply different costing systems (2.5):

– unit

CONTENTS

1 Management accounting

1.1 Introduction

The primary purpose of **Management accounting** is to provide information for use within an organisation. **Internal users**, such as departmental managers, will require a variety of information to ensure the smooth running of their department.

It is also possible that some **external users**, such as banks, may also review the management accounts of a business.

1.2 The aims of management accounting

The aim of management accounting is to assist management in the following areas of running a business:

- **Decision making**

  Management accountants use management information to make informed decisions about the future.

- **Planning**

  Management accountants provide the information for the creation of short, medium and long term plans; for example, a short term plan is the preparation of annual budgets.

- **Co-ordinating**

  Planning enables all departments to be co-ordinated and to work together.

- **Controlling**

  The comparison of actual results with the budget helps to identify areas where operations are not running according to plan. Investigating the causes, and acting on the results of that investigation, helps to control the activities of the business.

- **Communicating**

  Preparing plans that are then distributed to departmental managers helps to communicate the aims of the business to those managers.

- **Motivating**

  Plans and budgets should include targets to motivate managers (and staff) and improve their performance. If the target is too difficult, however, it is likely to demotivate and the target is unlikely to be achieved.

1.3 Management information

A management accountant's main objective is to provide information to managers to enable the correct decisions to be made. The information provided may be the same as that required for financial accounting but there are no regulations that need to be applied.

Management information needs to have the attributes of good information. It needs to be:

- **Fit for purpose** – management information needs to be **accurate**, **relevant** and **complete**. The reason the information is required will determine how accurate it needs to be. For example, if the cost of a single item is required then pounds and pence will be needed for accuracy but the costs for a division or department of an organisation may be accurate to the nearest thousand pounds. Information needs to be complete enough to enable managers to make informed decisions. Ensuring that information is complete does not mean that all information should be provided to all managers. Managers only require information that will be relevant to their decisions.
- **Cost-effective** – the benefits obtainable from the information must also exceed the cost of acquiring it.
- **Timely** – information should be available when it is required. To improve timeliness Management Information Systems can be installed into organisations. These are computer packages that allow reports to be produced and data to be extracted with ease. Information which is not available until after a decision is made will be useful only for comparisons and long term control.

1.4 Cost accounting

Cost accounting is usually a large part of management accounting. As its name suggests, it is concerned with **establishing costs**. It developed within manufacturing businesses.

Cost accounting is primarily directed at enabling management to perform the functions of **planning, control** and **decision making**:

(a) determining costs and profits during a control period

(b) valuing inventory of raw materials, work in progress and finished goods, and controlling inventory levels

(c) preparing budgets, forecasts and other control data for a forthcoming control period

(d) creating a reporting system which enables managers to take corrective action where necessary to control costs

(e) providing information for decision-making such as pricing.

Items (a) and (b) are traditional **cost accounting roles**; (c) to (e) extend into management accounting.

Cost accounting is not confined to the environment of manufacturing, although it is in this area that it is most fully developed. **Service industries, central and local government, and accountancy and legal practices** make use of cost accounting information. Furthermore, it is not restricted purely to manufacturing and operating costs, but also to administration, selling and distribution and research and development.

1.5 The Code of Ethics for Professional Accountants

The Code of Ethics for Professional Accountants, published by The International Federation of Accountants (IFAC), forms the basis for the ethical codes of many accountancy bodies, including the AAT, ICAEW, ACCA and CIMA.

The Code adopts a principles-based approach. It does not attempt to cover every situation where a member may encounter professional ethical issues, prescribing the way in which he or she should respond. Instead, it adopts a value system, focusing on fundamental professional and ethical principles which are at the heart of proper professional behaviour.

A management accountant's responsibility is not just to satisfy the needs of an individual client or employer. It should also be to act in the public interest. In acting in the public interest a management accountant should observe and comply with the fundamental ethical requirements shown in the IFAC Code.

The five key principles are as follows:

(a) Integrity

A person should be straightforward and honest in performing professional work and in all business relationships.

(b) Objectivity

A professional accountant should not allow bias, conflict of interest or undue influence of others to override professional or business judgments.

(c) Professional competence and due care

A professional accountant has a continuing duty to maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional service based on current developments in practice, legislation and techniques.

(d) Confidentiality

A professional accountant should respect the confidentiality of information acquired as a result of professional and business relationships and should not disclose any such information to third parties without proper and specific authority unless there is a legal or professional right or duty to disclose.

(e) Professional behaviour

A person should not act in any way that is unprofessional or does not comply with relevant laws and regulations.

Threats to compliance with the fundamental principles can be general in nature or relate to the specific circumstances of an appointment.

General categories of threats to the principles include the following:

- **The self-interest threat** – a threat to a member's integrity or objectivity may stem from a financial or other self-interest conflict.

  This could arise, for example, from a direct or indirect interest in a client or from fear of losing an engagement or having his or her employment terminated.

- **The self-review threat** – there will be a threat to objectivity if any product or judgement made by the member or the firm needs to be challenged or re-evaluated by him or her subsequently i.e. can you effectively review your own work?

- **The advocacy threat** – there is a threat to a member's objectivity if he or she becomes an advocate for or against the position taken by the client or employer in any adversarial proceedings or situation. The degree to which this presents a threat to objectivity will depend on the individual circumstances. The presentation of only one side of the case may be compatible with objectivity provided that it is accurate and truthful.

- **The familiarity or trust threat** – is a threat that the member may become influenced by his or her

  – knowledge of the issue

  – relationship with the client or employer

  – judgement of the qualities of the client or employer to the extent that he or she becomes too trusting.

- **The intimidation threat** – the possibility that the member may become intimidated by threat, by a dominating personality, or by other pressures, actual or feared, applied by the client or employer or by another.

2 Terminology

2.1 Introduction

This section looks at some of the basic terminology you will encounter whilst working through this unit.

2.2 Cost object

A **cost object** is anything for which costs can be ascertained. Cost units and cost centres, described below, are types of cost object.

2.3 Cost units

A **cost unit** is a unit of product or service in relation to which costs are ascertained.

To help with planning, control and decision making, businesses often need to calculate a cost per unit of output.

A key question, however, is what exactly we mean by a 'unit of output', or '**cost unit**'. This will mean different things to different businesses but we always looks at what the business produces.

- A car manufacturer will want to determine the cost of each car and probably different components as well.
- In a printing firm, the cost unit could be the specific customer order.
- For a paint manufacturer, the unit could be a litre of paint.
- An accountancy firm will want to know the costs incurred for each client. To help with this it is common to calculate the cost per hour of chargeable time spent by staff.

Service organisations may use several different cost units to measure the different kinds of service that they are providing.

Examples for a hotel might include:

- Meals served for the restaurant
- Rooms occupied for the cleaning staff
- Hours worked for the reception staff.

A composite cost unit is more appropriate if a service is a function of two variables. Examples of composite cost units are as follows:

- How much is carried over what distance (tonne-miles) for haulage companies
- How many patients are treated for how many days (patient-days) for hospitals
- How many passengers travel how many miles (passenger-miles) for public transport companies.

2.4 Responsibility centres

Definition

A **responsibility centre** is an individual part of a business whose manager has personal responsibility for its performance.

The main responsibility centres are:

- Cost centre
- Revenue centre
- Profit centre
- Investment centre.

A **cost centre** is a production or service location, function, activity or item of equipment whose costs are identified and recorded. A **cost centre** is a part of a business for which costs are determined.

- For a paint manufacturer cost centres might be: mixing department, packaging department, administration, or marketing departments.
- For an accountancy firm, the cost centres might be: audit, taxation, accountancy, word processing, administration, and canteen. Alternatively, they might be the various geographical locations, e.g. the London office, the Cardiff office, the Plymouth office.
- Cost centre managers need to have information about costs that are incurred and charged to their cost centres. The performance of a cost centre manager is judged on the extent to which cost targets have been achieved.

A **revenue centre** is a part of the organisation that earns sales revenue. It is similar to a cost centre, but only accountable for revenues, and not costs.

- Revenue centres are generally associated with selling activities, for example, a regional sales manager may have responsibility for the regional sales revenues generated.
- Each regional manager would probably have sales targets to reach and would be held responsible for reaching these targets.
- Sales revenues earned must be able to be traced back to individual (regional) revenue centres so that the performance of individual revenue centre managers can be assessed.

A **profit centre** is a part of the business for which both the costs incurred and the revenues earned are identified.

- Profit centres are often found in large organisations with a divisionalised structure, and each division is treated as a profit centre.
- Within each profit centre, there could be several costs centres and revenue centres.
- The performance of a profit centre manager is measured in terms of the profit made by the centre.
- The manager must therefore be responsible for both costs and revenues and in a position to plan and control both.
- Data and information relating to both costs and revenues must be collected and allocated to the relevant profit centres.

Managers of **investment centres** are responsible for investment decisions as well as decisions affecting costs and revenues.

- Investment centre managers are therefore accountable for the performance of capital employed as well as profits (costs and revenues).
- The performance of investment centres is measured in terms of the profit earned relative to the capital invested (employed).

Test your understanding 1

A cost centre is defined as:

A A unit of product or service for which costs are accumulated

B A production or service location, function, activity or item of equipment for which costs are accumulated

C Costs that relate directly to a unit

D Costs that contain both a fixed and a variable element

2.5 Product and period costs

A product cost is a cost that relates to the product or service being produced or provided e.g. raw materials.

A period cost is a cost that relates to a time period e.g. monthly rent, annual salaries.

2.6 The purpose of internal reporting

Management information can be produced in **any format** that is useful to the business and tends to be produced frequently, for instance **every month**.

To provide information as a basis for informed decision making the types of report that you may come across include:

- Budgeted financial reports – budgeted statement of profit or loss, budgeted statement of financial position
- Segmented reports – reports that are produced for different segments, products or services, of the business
- Variance reports – reports that are produced comparing what the business did (actual results) with what they had planned to do at the start of the period (flexed budget)
- Cash flow forecasts – reports that aim to forecast cash flow into and out of the business
- Cost cards – see next section.

Reports are usually intended to initiate a decision or an action.

If a report describes what happened in the past, a control action may be taken in an attempt to prevent a repeat of this behaviour.

Reports may advise on a certain course of action and recommend what decision should be taken.

3 The cost card

3.1 Cost cards

A cost card is used to show the breakdown of the costs of producing output based on the classification of each cost.

A cost card can be produced for one unit or a planned level of production. The cost card below is an example of a cost card for a planned level of production i.e. in total.

The following chapters are aimed at being able to build up the total or unit cost.

	£
Direct costs	
Direct materials	250,000
Direct labour	120,000
Direct expenses	10,000
Prime cost *(total of direct costs)*	380,000
Variable production overheads	15,000
Marginal production cost *(total of direct and variable costs)*	395,000
Fixed production overheads	35,000
Absorption cost *(total production cost)*	430,000
Non-production overheads (e.g. administration overhead; selling overhead)	20,000
Total cost	450,000

Note: The terminology in this cost card will be explained during your studies.

4 Summary

In this introductory chapter we looked at some of the basic principles and terminology used in cost and management accounting.

You need to be aware of the difference between **cost units** (individual units of a product or service for which costs can be separately ascertained) and **cost centres** (locations or functions in respect of which costs are accumulated).

Test your understanding answers

Test your understanding 1

A cost centre is defined as:

B A production or service location, function, activity or item of equipment for which costs are accumulated.