basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

# ACCOUNTING

## EXAMINATION GUIDELINES

## GRADE 12

## 2020

**These guidelines consist of 26 pages.**

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## 1. INTRODUCTION

The Curriculum and Assessment Policy Statement (CAPS) for Accounting outlines the nature and purpose of the subject Accounting. This guides the philosophy underlying the teaching and assessment of the subject in Grade 12. The points outlined in the CAPS consequently have a significant effect on the setting of Accounting examinations.

The purpose of these Examination Guidelines is to:

- Provide clarity on the depth and scope of the content to be assessed in the Grade 12 National Senior Certificate (NSC) Examination in Accounting.
- Assist teachers to adequately prepare learners for the NSC examinations.

This document deals with the final Grade 12 external examinations. It does not deal in any depth with the School-Based Assessment (SBA).

These Examination Guidelines should be read in conjunction with:

- *The National Curriculum Statement (NCS) Curriculum and Assessment Policy Statement (CAPS):* Accounting
- The National Protocol of Assessment: *An addendum to the policy document, the National Senior Certificate: A qualification at Level 4 on the National Qualifications Framework (NQF), regarding the National Protocol for Assessment (Grades R–12)*
- The national policy pertaining to the programme and promotion requirements of the National Curriculum Statement, Grades R–12

 

## 2. FORMAT OF MID- AND YEAR-END EXAMINATION PAPERS

The mid-year and year-end Accounting examination consists of TWO 2-hour papers of 150 marks each. The number of questions may vary from 3 to 5 questions in each paper. There is no stipulation on the marks allocated to each question.

All questions are COMPULSORY and are to be answered in specially prepared answer books, which are designed to assist learners in time-management. However, learners must understand that the answer books are not designed to replicate the full context of questions or subquestions. They must refer to the question paper to ensure that their responses meet the requirements of each question or subquestion.

The Accounting topics (previously in three fields) have been consolidated into two broad disciplines. Discipline 1 covers topics of reporting to external stakeholders, while Discipline 2 covers topics related to internal accounting processes.

The weighting of each broad discipline across the two papers is amended to:

| AMENDED WEIGHTING TO CATER FOR TWO EXAMINATION PAPERS | | |
|---|---|---|
| **Discipline 1** | Financial Reporting & Evaluation | **Paper 1**<br>150 marks; 2 hours |
| **Discipline 2** | Managerial Accounting, Internal Auditing & Control | **Paper 2**<br>150 marks; 2 hours |
| | **TOTAL MARKS FOR PAPERS 1 AND 2** | **300** |

**NOTE:**

- Refer to the table below and to APPENDIX 1 for specific examinable content across the two examination papers.
- The principle of integration of topics of Ethics and Internal Control in the teaching of other topics, where appropriate, is retained.
- The topic of Corporate Governance is particularly relevant to companies and published financial statements and is therefore included in Discipline 1 and will be examined in Paper 1.
- The topic of Ethics applies to both disciplines and may be examined in both papers, while the topic of Internal Control is included in Discipline 2 and will be examined in Paper 2.
- Certain financial indicators apply to both broad disciplines and both examination papers. These are listed below and in APPENDIX 1.
- Although a formula sheet will be provided, candidates will be required to identify the relevant financial indicators to be calculated and used in supporting comments to interpret and evaluate financial information. Teachers are advised to guide learners in understanding the logic of each financial indicator to enhance their comments on the indicators and to avoid reliance on the formula sheet.
- Because the current Grade 12 annual teaching plan (ATP) for the first two terms is focused more on Discipline 1 content and in order to facilitate the setting of a credible and well-balanced mid-year Grade 12 examination paper with correct weightings, the ATP is revised such that Cost Accounting (manufacturing) will be taught in Term 2 and Value-added Tax is moved to Term 3. The revised summary of the ATP for Grade 12 is included in APPENDIX 3.

## 3. EXAMINABLE AND NON-EXAMINABLE CONTENT

**NOTE:** *This is a summary only. Teachers must refer to the Accounting CAPS for specific requirements. Refer to Section 4 below for further details including relevant content from previous grades.*

| EXAMINABLE AND NON-EXAMINABLE CONTENT FOR GRADE 12 ACCOUNTING | | |
|---|---|---|
| **GRADE 12: PAPER 1** | | |
| ***Financial Reporting & Evaluation*** | | |
| 12.1.1 | Concepts relating to companies | |
| 12.1.2 | Concepts relating to GAAP & IFRS | Includes: issuing of shares at issue price (no par value, no share premium); buying back of shares<br>See APPENDICES 5.1, 5.2, 6.1, 6.2 and 6.3. |
| 12.1.3 | Unique Ledger Accounts of companies & interpretation thereof | |
| 12.1.4 | Accounting equation of companies | |
| 12.1.5 | Adjustments, final accounts & trial balances of companies | |
| 12.1.6 | Income Statement (Statement of Comprehensive Income) of companies | Includes: fixed asset valuation (see 12.1.11) and inventory valuation (see 12.1.12) |
| 12.1.7 | Balance Sheet (Statement of Financial Position) & Notes of companies | |
| 12.1.8 | Cash Flow Statement of companies | |
| 12.1.9 | Analysis & interpretation of financial statements of companies* | Includes all financial statements (See 12.1.6, 12.1.7, 12.1.8, 12.1.10.) |
| 12.1.10 | Analysis & interpretation of published financial statements & audit report of companies * | Refer to financial indicators below. |
| 12.1.11 | Valuation of fixed assets for reporting in financial statements | Includes: additions, depreciation & disposal |
| 12.1.12 | Inventory valuation for reporting in financial statements | Integrates valuation methods: FIFO; weighted average & specific identification |
| 12.1.13 | Professional bodies & Code of conduct | Role of independent auditors |
| 12.1.14 | Ethical behaviour & corporate governance in financial environments | |
| 12.1.15 | Legislation governing companies (overview only) | Companies Act (general overview only) |
| 12.1.16 | Close corporations (not examinable) | Concepts; Differences in financial stmts of companies and cc's (not examinable) |
| **GRADE 12: PAPER 2** | | |
| ***Managerial Accounting, Internal Auditing & Control*** | | |
| 12.2.1 | Analysis & interpretation of reconciliations: bank, debtors, creditors, age analysis | Includes Grade 11 content on reconciliations. See APPENDIX 5.3. |
| 12.2.2 | Value-added Tax – input, output and calculations | Calculation of amount payable/ receivable; VAT Control Account |
| 12.2.3 | Manufacturing – concepts | |
| 12.2.4 | Manufacturing: Production Cost Statement & Notes; Abridged/Short-form Income Statement & Notes | Includes Grade 11 content on Ledger Accounts |
| 12.2.5 | Analysis & interpretation of cost information, unit costs & break-even point # | Refer to financial indicator below.<br>See APPENDICES 5.6 and 6.5. |
| 12.2.6 | Analysis & interpretation of Cash Budget for sole traders and companies | Includes Grade 11 content on preparation of these items<br>See APPENDIX 5.4. |
| 12.2.7 | Analysis & interpretation of Projected Income Statement for sole traders and companies | |
| 12.2.8 | Application of internal control & audit processes: cash, fixed assets, inventories, debtors, creditors, income & expenses including salaries/ wages & including financial indicators # | Role of internal auditors<br>Refer to financial indicators below. |
| 12.2.9 | Recording & control of fixed assets including additions, depreciation & asset disposal | |
| 12.2.10 | Perpetual and periodic stock systems and control of inventories | |
| 12.2.11 | Valuation of inventories: FIFO, Weighted average & Specific identification # | Refer to financial indicators below.<br>See APPENDICES 5.5 and 6.4. |
| 12.2.12 | Ethical behaviour in financial environments | |

*** Refer to financial indicators for Paper 1 below.**
**# Refer to financial indicators for Paper 2 below.**

*

| FINANCIAL INDICATORS FOR FINANCIAL REPORTING (GRADE 12 PAPER 1) | |
|---|---|
| Gross profit on sales | Gross profit on cost of sales |
| Net profit on sales | Operating profit on sales |
| Operating expenses on sales | Stock turnover rate |
| Solvency ratio | Stockholding period |
| Current ratio | Average debtors' collection period |
| Acid-test ratio | Average creditors' payment period |
| Return on shareholders' equity | Earnings per share |
| Return on total capital employed | Dividends per share |
| Debt-equity ratio (gearing) | Dividend pay-out rate |
| Net asset value per share | |

#

| FINANCIAL INDICATORS FOR INTERNAL CONTROL AND MANUFACTURING (GRADE 12 PAPER 2) | |
|---|---|
| Gross profit on cost of sales | Stock turnover rate |
| Operating expenses on sales | Stockholding period |
| Operating profit on sales | Average debtors' collection period |
| Net profit on sales | Average creditors' payment period |
| Break-even point | |

## 4. RELEVANT SECTIONS OF THE CAPS FOR ACCOUNTING WHICH HAVE A DIRECT EFFECT ON THE SETTING OF EXAMINATION PAPERS

The Accounting CAPS contains several requirements which, apart from influencing the general teaching and assessment of the subject, have a direct bearing on the structure of and content addressed in formal examinations, including the Accounting NSC examination. The relevant sections are as follows (refer to the CAPS for further details):

| CAPS PAGE | DETAILS |
|---|---|
| Page 8–9 | **The nature and purpose of Accounting**, i.e. the subject is not limited to recording and preparation of financial information; the subject also addresses skills of recording, analysing, interpreting, communicating, presenting and problem-solving. |
| Page 8 | **Weighting of content to be addressed in the Grades 10–12 curriculum**<br>50%: Recording, Reporting and Evaluation of Financial Information & Corporate Governance<br>50%: Manufacturing, Forecasting & Internal Auditing and Control |
| Page 42 | **Formal assessment tasks**, i.e. these should prepare learners for the demands of the Accounting NSC examination. |
| Page 44 | **Content relating to previous grades**, i.e. Grade 12 examinations may contain a 20% weighting of content stipulated in previous grades which has an impact on Grade 12 content. |
| Page 44 | **Cognitive levels to be addressed (weighting)**<br>Lower order: 30%<br>Middle order: 40%<br>Higher order: 30% |
| Page 44 | **Problem-solving**, i.e. 10%–15% of all examinations may address problem-solving questions (in new and unfamiliar contexts) using critical and creative thinking. |

## 5. DEGREES OF CHALLENGE

All examinations, and most assessment tasks in Accounting, must reflect subquestions of differing degrees of challenge. The following weighting of degrees of challenge is generally accepted as appropriate for Grades 10–12 examinations:

| **Easy** | **Moderate** | **Difficult** |
|---|---|---|
| **30%** | **40%** | **30%** |

Note that degrees of challenge are not necessarily tied to specific cognitive levels. A higher-order cognitive level question might not necessarily be Difficult, while a lower-order level question might not necessarily be Easy.

For example:

- In preparing financial statements, year-end adjustments will be regarded as being of the middle-order cognitive level (i.e. Applying), yet they could be Easy, Moderate or Difficult in challenge depending on the adjustment required.
- In comparing the % returns of two companies, the appropriate cognitive level would be higher order (i.e. Evaluating), yet the degree of challenge might well be Easy, depending on the context of the question and information provided.
- In a problem-solving question, the identifying of a problem from given financial information will be regarded to be of the higher-order level (i.e. Creating), but could be Easy, Moderate or Difficult in challenge, depending on the context of the question and information provided.
- Assessment of whether a subquestion is Easy, Moderate or Difficult is obviously a subjective exercise which depends on the opinion and perception of the reviewer. Nevertheless, the exercise must be carried out by examiners and moderators to ensure that question papers cater for the full range of abilities of learners who are adequately prepared for the Accounting NSC examination.

**NOTE: REFER TO THE APPENDICES ATTACHED.**

## 6. CONCLUSION

This Examination Guidelines document is meant to articulate the assessment aspirations espoused in the CAPS document. It is therefore not a substitute for the CAPS document which teachers should teach to.

Qualitative curriculum coverage as enunciated in the CAPS cannot be over-emphasised.

## 7. APPENDICES

**APPENDIX 1**

### CHECKLIST OF ACCOUNTING TOPICS ACROSS TWO EXAMINATION PAPERS, GRADES 10–12 (amended with renumbered topics)

| GRADE 12 IMPLEMENTATION DATE: 2020 | | GRADE 11 IMPLEMENTATION DATE: 2019 | | GRADE 10 IMPLEMENTATION DATE: 2018 | |
|---|---|---|---|---|---|
| **GRADE 12: PAPER 1** | | **GRADE 11: PAPER 1** | | **GRADE 10: PAPER 1** | |
| ***Financial Reporting & Evaluation*** | | ***Financial Reporting & Evaluation*** | | ***Financial Reporting & Evaluation*** | |
| 12.1.1 | Concepts relating to companies | 11.1.1 | Concepts relating to partnerships & clubs | 10.1.1 | Concepts relating to sole traders |
| 12.1.2 | Concepts relating to GAAP & IFRS | 11.1.2 | Concepts relating to GAAP | 10.1.2 | Concepts relating to GAAP |
| 12.1.3 | Unique Ledger Accounts of companies & interpretation thereof | 11.1.3 | Ledger Accounts of partnerships incl. interpretation | 10.1.3 | Bookkeeping: documents & journals of sole traders |
| | | 11.1.4 | Ledger Accounts of clubs incl. interpretation | 10.1.4 | Ledgers and trial balances of sole traders |
| 12.1.4 | Accounting equation of companies | 11.1.5 | Accounting equation of partnerships | 10.1.5 | Accounting equation of sole traders |
| 12.1.5 | Adjustments, final accounts & trial balances of companies (incl. valuation of fixed assets & stock; see 12.1.11 & 12.1.12) | 11.1.6 | Adjustments, final accounts & trial balances of partnerships | 10.1.6 | Adjustments, final accounts & trial balances of sole traders |
| 12.1.6 | Income Statement (Statement of Comprehensive Income) of companies | 11.1.7 | Income Statement (Statement of Comprehensive Income) of partnerships | 10.1.7 | Income Statement (Statement of Comprehensive Income) of sole traders |
| 12.1.7 | Balance Sheet (Statement of Financial Position) & Notes of companies | 11.1.8 | Balance Sheet (Statement of Financial Position) & Notes of partnerships | 10.1.8 | Balance Sheet (Statement of Financial Position) & Notes of sole traders |
| 12.1.8 | Cash Flow Statement of companies | 11.1.9 | Statement of Receipts & Payments of clubs | | |
| 12.1.9 | Analysis & interpretation of financial statements of companies listed in 12.1.6, 12.1.7, 12.1.8 and 12.1.10 ***** | 11.1.10 | Analysis & interpretation of financial statements of partnerships ***** | 10.1.9 | Analysis & interpretation of financial statements of sole traders ***** |
| 12.1.10 | Analysis & interpretation of published financial statements & audit reports of companies ***** | | | 10.1.10 | Salaries & wages – recording & interpretation |
| 12.1.11 | Valuation of fixed assets for reporting in financial statements incl. additions, depreciation & disposal | 11.1.11 | Valuation of fixed assets including additions, depreciation & disposal | 10.1.11 | Calculation & reporting of additions to fixed assets and depreciation |
| 12.1.12 | Inventory valuation for reporting in financial statements (FIFO, Weighted Average & Specific Identification) | 11.1.12 | Periodic & perpetual stock systems – concepts & reporting | | |
| 12.1.13 | Professional bodies & Code of conduct | | | | |
| 12.1.14 | Ethical behaviour & corporate governance in financial environments | 11.1.13 | Ethical behaviour in financial environments | 10.1.12 | Ethical behaviour in financial environments |
| 12.1.15 | Legislation governing companies (overview only) | | | | |
| 12.1.16 | Close corporations (background only; not examinable) | | | | |
| *** Financial indicators for Grade 12 Paper 1** | | *** Financial indicators for Grade 11 Paper 1** | | *** Financial indicators for Grade 10 Paper 1** | |
| Gross profit on sales; Gross profit on cost of sales; Net profit on sales; Operating expenses on sales; Operating profit on sales; Current ratio; Acid-test ratio; Stock turnover rate; Stockholding period; Average debtors' collection period; Average creditors' payment period; Solvency ratio; Debt-equity ratio (gearing); Return on shareholders' equity; Return on total capital employed; Net asset value per share; Dividends per share; Earnings per share; Dividend pay-out rate | | Gross profit on sales; Gross profit on cost of sales; Net profit on sales; Operating expenses on sales; Operating profit on sales; Current ratio; Acid-test ratio; Stock turnover rate; Stockholding period; Average debtors' collection period; Average creditors' payment period; Solvency ratio; Debt-equity ratio (gearing); Return on partners' equity | | Gross profit on sales; Gross profit on cost of sales; Net profit on sales; Operating expenses on sales; Operating profit on sales; Current ratio; Acid-test ratio; Solvency ratio; Return on owner's equity | |

**NOTE: REFER TO NEXT PAGE FOR PAPER 2 TOPICS.**

**APPENDIX 1 CONTINUED**

## CHECKLIST OF ACCOUNTING TOPICS ACROSS TWO EXAMINATION PAPERS, GRADES 10–12 (amended with renumbered topics)

| GRADE 12 IMPLEMENTATION DATE: 2020 | | GRADE 11 IMPLEMENTATION DATE: 2019 | | GRADE 10 IMPLEMENTATION DATE: 2018 | |
|---|---|---|---|---|---|
| **GRADE 12: PAPER 2** | | **GRADE 11: PAPER 2** | | **GRADE 10: PAPER 2** | |
| ***Managerial Accounting, Internal Auditing & Control*** | | ***Managerial Accounting, Internal Auditing & Control*** | | ***Managerial Accounting & Internal Control*** | |
| 12.2.1 | Analysis & interpretation of reconciliations: bank, debtors, creditors, age analysis | 11.2.1 | Preparation of bank & creditors' reconciliations | 10.2.1 | Preparation of debtors' & creditors' lists to agree to Control accounts |
| 12.2.2 | Value-added Tax: Input, Output & calculations | 11.2.2 | Value-added Tax: calculations | 10.2.2 | Value-added Tax: concepts & basic calculations |
| 12.2.3 | Manufacturing: concepts | 11.2.3 | Manufacturing: concepts & calculations | 10.2.3 | Manufacturing: concepts & basic calculations |
| 12.2.4 | Manufacturing: Production Cost Statement & Notes; Abridged/ Short-form Income Statement & Notes | 11.2.4 | Cost Accounting – Ledger Accounts | 10.2.4 | Indigenous bookkeeping (not examinable) |
| 12.2.5 | Analysis & interpretation of cost information, unit costs & break-even point # | 11.2.5 | Calculation of unit costs & break-even point | | |
| 12.2.6 | Analysis & interpretation of Cash Budgets for sole traders and companies | 11.2.6 | Preparation of Cash Budget for sole traders | 10.2.5 | Budgeting: concepts & basic calculations |
| 12.2.7 | Analysis & interpretation of Projected Income Statement for sole traders and companies | 11.2.7 | Preparation of Projected Income Statement for sole traders | | |
| 12.2.8 | Application of internal control & audit processes: cash, fixed assets, inventories, debtors, creditors, income & expenses (including salaries/wages) & including financial indicators # | 11.2.8 | Application of internal control & audit processes: cash, fixed assets, inventories, debtors, creditors, income & expenses (including salaries/wages) & including financial indicators # | 10.2.6 | Application of internal control & audit processes: cash, fixed assets, inventories, debtors, creditors, income & expenses (including salaries/wages) & including financial indicators # |
| 12.2.9 | Recording & control of fixed assets including additions, depreciation & asset disposal | 11.2.9 | Valuation of fixed assets including additions, depreciation & asset disposal | 10.2.7 | Calculation and recording of fixed assets & depreciation |
| 12.2.10 | Perpetual & periodic stock systems and control of inventories | 11.2.10 | Periodic & perpetual inventory systems – concepts, recording & control | 10.2.8 | Perpetual inventory system; recording & control of inventories |
| 12.2.11 | Valuation of inventories (FIFO, Weighted average & Specific identification) | | | | |
| 12.2.12 | Ethical behaviour in financial environments | 11.2.11 | Ethical behaviour in financial environments | 10.2.9 | Code of ethics in businesses, principles and values |
| **# Financial indicators for Grade 12 Paper 2** | | **# Financial indicators Grade 11 Paper 2** | | **# Financial indicators Grade 10 Paper 2** | |
| Gross profit on cost of sales; Net profit on sales; Operating expenses on sales; Operating profit on sales; Stock turnover rate; Stockholding period; Average debtors' collection period; Average creditors' payment period; Break-even point | | Gross profit on cost of sales; Net profit on sales; Operating expenses on sales; Operating profit on sales; Stock turnover rate; Stockholding period; Average debtors' collection period; Average creditors' payment period | | Gross profit on cost of sales; Net profit on sales; Operating expenses on sales; Operating profit on sales | |

**APPENDIX 2**

## CONTINUATION OF SPECIFIC POLICIES RELATING TO CERTAIN GRADE 12 TOPICS

Under previous curricula certain limitations were placed on the depth of certain topics stipulated in the Grade 12 curriculum relating to Companies. This is a vast topic which is a core focus area in further studies in financial, commercial and management fields at tertiary level. It is confirmed that these limitations continue to apply under the Accounting CAPS.

### 1.1 Share capital of companies

For the purposes of preparing company financial statements, share capital is restricted to ordinary shares only.

***Reason:***
It is not the intention of the Grade 12 curriculum to cover preference shares or other types of shares in the preparation of financial statements. However, when interpreting published annual reports, teachers are advised to alert learners to different types of shares that may appear in the published financial statements (for background information).

### 1.2 Investments of companies

For the purposes of preparing financial statements, investments are restricted to fixed deposits.

***Reason:***
It is not the intention of the curriculum to cover associate or holding/subsidiary company relationships. Therefore, the investment in shares of other companies is excluded.

### 1.3 Asset disposal in Cash Flow Statements

For the purposes of preparing Cash Flow Statements, disposal of fixed assets will be at carrying value (book value) only.

***Reason:***
The profit or loss on the disposal of fixed assets would add another complication in respect of cash and non-cash items, which is not intended.

**APPENDIX 3**

## SUMMARY OF THE ANNUAL TEACHING PLAN

| TERM 1 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
| **Topic** | Companies: unique transactions<br><br>*Close Corporations* | | Companies: final accounts, financial statements:<br>Income Statement (Statement of Comprehensive Income),<br>Balance Sheet (Statement of Financial Position),<br>Cash Flow Statement Company Audit Report | | | | | Companies: analysis & interpretation of financial statements (internal & published) | | Revision & Test |
| | Integrate Internal control, Corporate governance and Ethics with all the topics | | | | | | | | | |
| ***Assessment*** | **Written report** | | | | **Informal** | | | **Control Test** | | |

| TERM 2 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
| **Topic** | Inventory Valuations | | Fixed assets | Cost Accounting: PCS with notes,<br>Trading and Profit & Loss Statement,<br>Unit costs, Break-even point | | | Reconciliations | | Mid-year Examination | |
| | Integrate Internal control, Corporate governance and Ethics with all the topics | | | | | | | | | |
| ***Assessment*** | **Project (published financial statements)** | | | **Informal** | | | | **Mid-year Examination** | | |

| TERM 3 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** | **Week 10** |
| **Topic** | Value-added Tax | | Budgeting | | | Revision | | Trial Examination | | |
| | Integrate Internal control, Corporate governance and Ethics with all the topics | | | | | | | | | |
| ***Assessment*** | **Case Study** | | | **Control Test** | | | | **Trial Examination** | | |

| TERM 4 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** | **Week 6** | **Week 7** | **Week 8** | **Week 9** |
| **Topic** | Revision and examination preparation | | | | **Final Examination** | | | | **Planning for next year** |
| ***Assessment*** | **Informal** | | | | | | | | |

**APPENDIX 4**

## GRADE 12 ACCOUNTING: FORMULA SHEET

| FORMULA SHEET: GRADE 12 ACCOUNTING FINANCIAL INDICATORS | | |
|---|---|---|
| $\frac{\text{Gross profit}}{\text{Sales}} \times \frac{100}{1}$ | $\frac{\text{Gross profit}}{\text{Cost of sales}} \times \frac{100}{1}$ | $\frac{\text{Net profit before tax}}{\text{Sales}} \times \frac{100}{1}$ |
| $\frac{\text{Net profit after tax}}{\text{Sales}} \times \frac{100}{1}$ | $\frac{\text{Operating expenses}}{\text{Sales}} \times \frac{100}{1}$ | $\frac{\text{Operating profit}}{\text{Sales}} \times \frac{100}{1}$ |
| Total assets **:** Total liabilities | Current assets **:** Current liabilities | (Current assets – Inventories) **:** Current liabilities |
| (Trade & other receivables + Cash & cash equivalents) **:** Current liabilities | | $\frac{\text{Average trading stock}}{\text{Cost of sales}} \times \frac{365}{1}$ |
| $\frac{\text{Average debtors}}{\text{Credit sales}} \times \frac{365}{1}$ | $\frac{\text{Average debtors}}{\text{Sales}} \times \frac{365}{1}$ | $\frac{\text{Cost of sales}}{\text{Average trading stock}}$ |
| $\frac{\text{Trading stock}}{\text{Cost of sales}} \times \frac{365}{1}$ | $\frac{\text{Average creditors}}{\text{Credit purchases}} \times \frac{365}{1}$ | $\frac{\text{Average creditors}}{\text{Cost of sales}} \times \frac{365}{1}$ |
| Non-current liabilities **:** Shareholders' equity | $\frac{\text{Net income after tax}}{\text{Average shareholders' equity}} \times \frac{100}{1}$ | $\frac{\text{Net income after tax}}{\text{Number of issued shares}} \times \frac{100}{1}$ |
| $\frac{\text{Net income before tax + Interest on loans}}{\text{Average shareholders' equity + Average non-current liabilities}} \times \frac{100}{1}$ | | $\frac{\text{Shareholders' equity}}{\text{Number of issued shares}} \times \frac{100}{1}$ |
| $\frac{\text{Dividends for the year}}{\text{Number of issued shares}} \times \frac{100}{1}$ | $\frac{\text{Dividends per share}}{\text{Earnings per share}} \times \frac{100}{1}$ | $\frac{\text{Total fixed costs}}{\text{Selling price per unit – Variable costs per unit}}$ |

**APPENDIX 5**

## CLARIFICATION OF CERTAIN ASPECTS OF THE CAPS CONTENT

### 5.1 Shares of no par value

The concept of par value no longer applies. Section 35(2) of the new Companies Act states that a share does not have a nominal or par value.

***Reason:***
Par value bears no resemblance to the true value of a share, except on the first day of a company's life. Par value was also confusing to many shareholders.

***Application:***
Shares are now issued at *issue* price.

- New shares may be issued at any price, i.e. higher/lower/the same as the average price or any previous issue price. The full proceeds of the share issue are credited to the Share Capital Account. The double entry in the Ledger is:

| | |
|---|---|
| **Debit:** | Bank |
| **Credit:** | Ordinary share capital |

- Consequently, the Share Premium Account no longer applies.
- Effect on the Accounting Equation: **Assets +**; **Owners' equity +**

**See Example 6.1 below.**

### 5.2 Buying back (repurchase) of shares by a company

In terms of Section 48 of the new Companies Act, the directors of a company may decide to repurchase shares from a shareholder, subject to certain conditions.

***Reasons*:**
The reasons are numerous, e.g. reduction in the number of shareholders could result in bigger returns for the remaining shareholders; directors might wish to adjust the debt-equity ratio through the buy-back of shares; heirs of a deceased estate might not wish to become shareholders of a company; a dissatisfied shareholder might wish to withdraw for personal reasons; family members in a private company might wish to retain control of the company by reducing the number of issued shares.

***Application policy for examination purposes regarding Accounting Equation and preparing financial statements:***

- Repurchase of shares will be restricted to values *higher* than the average issue price of the ordinary shares. The effect on the Accounting Equation will be:
  **Assets –     Owners' equity –**
- In preparing the financial statements:

| |
|---|
| **Bank is reduced** by the repurchase value paid for the shares |
| **Ordinary share capital is reduced** by the number of shares multiplied by the average issue price |
| **Retained income is reduced** by the difference (this represents the income that had previously been retained in respect of the shares repurchased) |

***Reasons*:**
- It is not the intention of the curriculum to complicate entries through the introduction of new accounts.
- As many shareholders will have bought shares from existing shareholders (third parties) on the JSE at market prices, it is normally not possible for a company to determine the original purchase price paid by a specific shareholder. The average issue price will therefore be used in determining the entries to be made in the buying back of shares. Note that this is effectively the weighted-average price as the balance on the Share Capital Account takes price and quantity into account already.
- The effect of the repurchase of shares on the Accounting Equation and on the financial statements will be identical, whichever bookkeeping entries are applied.

***Bookkeeping entries:***
Universities and different textbooks may choose to treat the repurchase of shares differently through the introduction of new accounts.

- For examination purposes, examiners and markers will have to be sensitive and vigilant to differing bookkeeping treatment in the Ledger, particularly in the Retained Income and Appropriation Accounts. Valid alternative methods will be accepted. However, the following approach reflects the simplest method without introducing new accounts.
- In buying back shares, the accounts affected are **Bank**, **Share Capital** and **Retained Income**. Under this method, the double entries in the Ledger will be:

| | |
|---|---|
| **Debit:** | Ordinary share capital (with average issue price x number of shares repurchased) |
| **Debit:** | Retained income (with the difference) |
| **Credit:** | Bank (with the amount paid for the shares repurchased) |

- The difference between the repurchase price and the average issue price of the shares is debited to Retained Income because this represents the amount of income that had previously been retained by the business in respect of those shares.

 

- Regarding the Appropriation Account, since the buy-back of shares affects the Retained Income Account, there is no need to transfer the beginning Retained Income balance to the Appropriation Account; however, different valid methods will be accepted.

**See Example 6.2 and Example 6.3 below.**

## 5.3 Creditors' reconciliations

Grade 11 content under the CAPS includes the reconciliation of a Creditors' Ledger Account (in the Creditors' Subsidiary Ledger) to the statement of account received from a creditor. Grade 12 content stipulates analysis and interpretation of Creditors' Reconciliations. As 20% of any examination paper may include relevant content from a previous grade, preparation applications in respect of Creditors' Reconciliations are examinable in Grade 12. Similar reasoning applies to Bank and Debtors' Reconciliations.

## 5.4 Projected Income Statements and Cash Budgets of companies

The CAPS content includes companies, in addition to sole traders, under this topic. Consequently, specific items which may be reflected in Projected Income Statements and Cash Budgets include: directors' fees, audit fees, provisional tax, interim and final dividends paid, issue and repurchase of shares.

## 5.5 Inventory valuation: Specific identification

In addition to the FIFO and weighted-average methods of valuing stock, the CAPS stipulates the specific identification method. This should not create any problems for learners as it is a method that would have been utilised at Grade 8–10 levels where the specific cost price of an article is provided either in rand terms or in code form.

**See Example 6.4 below.**

## 5.6 Break-even point and Contribution per unit

The concept of Contribution per unit is important in calculating the Break-even point and in projecting future production and sales targets. The example below provides further background and calculations on this topic.

**See Example 6.5 below.**

**APPENDIX 6**

## EXAMPLES OF SPECIFIC ITEMS OF THE CAPS CONTENT

**NOTE:** These examples are intended to assist teachers in their explanations of basic principles and procedures. ***They are not designed as exemplars for examination questions***.

### Example 6.1 Shares of no par value

You are provided with information relating to ABC Ltd for the year ended 30 June 20.3. The company has an authorised share capital of 500 000 shares. 60% of these shares were already issued by 1 July 20.2.

**Required:**

1. For the issue of new shares on 31 December 20.2, complete the table for Account Debited, Account Credited and effect on the Accounting Equation.
2. Prepare the Note to the Balance Sheet for Ordinary share capital on 30 June 20.3.
3. Prepare Owners' Equity section of the Balance Sheet on 30 June 20.3.

**Information:**

(a) The following balances appeared in the Ledger:

| | **1 June 20.2** | **30 June 20.3** |
|---|---|---|
| Ordinary share capital | R1 500 000 | ? |
| Retained income | R 620 000 | R970 000 |

(b) On 31 December 20.2, all the unissued shares were issued at the JSE market price of R7,00 per share.

**Solution:**

1.

| **Account debited** | **Account credited** | **Effect on Accounting Equation** | | |
|---|---|---|---|---|
| | | **Assets** | **Owners' equity** | **Liabilities** |
| Bank | Ordinary share capital | +R1 400 000 | +R1 400 000 | 0 |

2.

| **Note 7** | **Ordinary share capital** | |
|---|---|---|
| | | |
| | **Authorised** | |
| | Number of authorised ordinary shares: 500 000 shares | |
| | | |
| | **Issued** | R |
| | 300 000 shares in issue at beginning of year | 1 500 000 |
| | 200 000 shares issued during the year at R7,00 per share | 1 400 000 |
| | 500 000 shares in issue at end of year | 2 900 000 |

3. **ABC LIMITED**
**Extract from the Balance Sheet on 30 June 20.3**

| | **Note** | **R** |
|---|---|---|
| **SHAREHOLDERS' EQUITY** | | 3 870 000 |
| Ordinary share capital | 7 | 2 900 000 |
| Retained income | 8 | 970 000 |

## Example 6.2 Repurchase (buy-back) of shares

You are provided with information relating to XYZ Ltd for the year ended 30 June 20.3. The company has an authorised share capital of 500 000 shares. 60% of these shares had already been issued by 1 July 20.2.

**Required:**

1. For the issue of new shares on 31 December 20.2 and the repurchase of the shares on 31 March 20.3, complete the table for Account Debited, Account Credited and effect on the Accounting Equation.
2. Prepare the following Notes to the Balance Sheet on 30 June 20.3:
   Ordinary share capital
   Retained income
3. Prepare Owners' Equity section of the Balance Sheet on 30 June 20.3.
4. Show how the new issue of shares and the repurchase (buy-back) of shares will appear in the Cash Flow Statement for the year ended 30 June 20.3.

**Information:**

(a) The following balances appeared in the Ledger:

| | **30 June 20.3** | **1 June 20.2** |
|---|---|---|
| Ordinary share capital | ? | R1 500 000 |
| Retained income | ? | R 620 000 |
| Loan from Ace Bank | R 900 000 | R 400 000 |

(b) On 31 December 20.2, all the unissued shares were issued at the JSE market price of R7,00 per share. These new shares do not qualify for interim dividends.
(c) On 31 March 20.3, the directors decided to repurchase 80 000 shares at R7,80 per share from the estate of a shareholder who had died. This shareholder had originally purchased his shares on the JSE at various times and at different prices over the past five years.
(d) The company made a pre-tax profit of R1 200 000 (after-tax profit R840 000) for the 20.3 financial year. Interim dividends of 40 cents per share were paid on 31 December 20.2. Final dividends declared on 30 June 20.3 were 55 cents per share.

**Solution:**

1.

| Account debited | Account credited | Effect on Accounting Equation | | |
|---|---|---|---|---|
| | | **Assets** | **Owners' equity** | **Liabilities** |
| **31 December 20.2:** | | | | |
| Bank | Ordinary share capital | +R1 400 000 | +R1 400 000 | 0 |
| **31 March 20.3:** | | | | |
| Ordinary share capital | Bank | –R464 000* | –R464 000* | 0 |
| Retained income | Bank | –R160 000** | –R160 000** | 0 |

***Workings*:**
Average issue price of shares on 31 March 20.3: R2 900 000 ÷ 500 000 shares = R5,80
Value of 80 000 shares at average issue price of R5,80 = 80 000 x R5,80 = R464 000*
80 000 shares were repurchased at R7,80 per share = 80 000 x R7,80 = R624 000
Difference = Retained income portion of shares repurchased = 80 000 x R2 = R160 000**

## Example 6.2 Solution (continued)

2.

| Note 7 | Ordinary share capital | |
|---|---|---|
| | | |
| | **Authorised** | |
| | Number of authorised ordinary shares: 500 000 shares | |
| | | |
| | **Issued** | **R** |
| | 300 000 shares in issue at beginning of year | 1 500 000 |
| | 200 000 shares issued during year at R7,00 per share | 1 400 000 |
| | 80 000 shares repurchased during year (average issue price R5,80 per share) | (464 000) |
| | 420 000 shares in issue at end of year *** | 2 436 000 |

******NOTE:***
*After the repurchase of 80 000 shares, average issue price of 420 000 shares remains R5,80.*

| Note 8 | Retained income | |
|---|---|---|
| | | **R** |
| | Retained income at beginning of year | 620 000 |
| | Net profit after tax for the year | 840 000 |
| | Retained income on 80 000 shares repurchased | (160 000) |
| | Dividends | (351 000) |
| | Interim (300 000 shares x R0,40) | (120 000) |
| | Final (420 000 shares x R0,55) | (231 000) |
| | Retained income at end of year | 949 000 |

3. **XYZ LIMITED**
**Extract from the Balance Sheet on 30 June 20.3**

| | Note | R |
|---|---|---|
| **SHAREHOLDERS' EQUITY** | | 3 385 000 |
| Ordinary share capital | 7 | 2 436 000 |
| Retained income | 8 | 949 000 |

4. **XYZ LIMITED**
**Extract from the Cash Flow Statement for the year ended 30 June 20.3**

| | | R |
|---|---|---|
| **Cash effects of financing activities** | | 1 276 000 |
| Proceeds of shares issued | | 1 400 000 |
| Repurchase of shares (160 000 + 464 000) | | (624 000) |
| Proceeds of loan received | | 500 000 |

**Example 6.3 Appropriation and Retained Income Accounts: Repurchase of shares**

Refer to the information in Example 6.2.

**Required:**

Prepare the Retained Income and Appropriation Accounts in the Ledger on 30 June 20.3.

**Solutions: Note that all three methods below are acceptable.**

**Solution Method (i):**

***NOTE:*** *Under this method, retained income at the beginning of the year is not transferred to the Appropriation Account. Instead, the retained income for the year is transferred from the Appropriation Account to the Retained Income Account. The transfers are not complicated by the share buy-back adjustment.*

**LEDGER OF XYZ LIMITED**
**Balance Sheet accounts section**
**RETAINED INCOME B2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20.3 Mar 31 | Bank # | | 160 000 | 20.2 Jul 1 | Balance | b/d | 620 000 |
| Jun 30 | Balance | c/d | 949 000 | 20.3 Jun 30 | Appropriation | | 489 000 |
| | | | 1 109 000 | | | | 1 109 000 |
| | | | | 20.3 Jul 1 | Balance | b/d | 949 000 |
| | | | | | | | |

**Final accounts section**
**APPROPRIATION F3**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20.3 Jun 30 | Income tax | | 360 000 | 20.3 Jun 30 | Profit & loss | | 1 200 000 |
| | Dividends on ordinary shares | | 351 000 | | | | |
| | Retained income | | 489 000 | | | | |
| | | | 1 200 000 | | | | 1 200 000 |
| | | | | | | | |

*# Alternative contra details possible if alternative valid intermediary accounts are used./May be processed through the Appropriation Account if retained income figures are adjusted accordingly.*

**Solution Method (ii):**

***NOTE:*** *Under this method, retained income at the beginning of the year is transferred to the Appropriation Account. Consequently, the retained income (before the share buy-back adjustment) at the end of the year has to be transferred from the Appropriation Account to the Retained Income Account.*

**LEDGER OF XYZ LIMITED**
**Balance Sheet accounts section**
**RETAINED INCOME B2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20.3 Mar 31 | Bank # | | 160 000 | 20.2 Jul 1 | Balance | b/d | 620 000 |
| | Appropriation | | 620 000 | 20.3 Jun 30 | Appropriation | | 1 109 000 |
| Jun 30 | Balance | c/d | 949 000 | | | | |
| | | | 1 729 000 | | | | 1 729 000 |
| | | | | 20.3 Jul 1 | Balance | b/d | 949 000 |
| | | | | | | | |

**Final accounts section**
**APPROPRIATION F3**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20.3 Jun 30 | Income tax | | 360 000 | 20.3 Jun 30 | Profit & loss | | 1 200 000 |
| | Dividends on ordinary shares | | 351 000 | | Retained income | | 620 000 |
| | Retained income | | 1 109 000 | | | | |
| | | | 1 820 000 | | | | 1 820 000 |
| | | | | | | | |

*# Alternative contra details possible if alternative valid intermediary accounts are used./May be processed through the Appropriation Account if retained income figures are adjusted accordingly.*

**Solution Method (iii):**

***NOTE:*** *Under this method, retained income at the beginning of the year (less the share buy-back adjustment) is transferred to the Appropriation Account. Consequently, the retained income (after the share buy-back adjustment) at the end of the year has to be transferred from the Appropriation Account to the Retained Income Account.*

**LEDGER OF XYZ LIMITED**
**Balance Sheet accounts section**
**RETAINED INCOME B2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20.3 Mar 31 | Bank # | | 160 000 | 20.2 Jul 1 | Balance | b/d | 620 000 |
| | Appropriation | | 460 000 | 20.3 Jun 30 | Appropriation | | 949 000 |
| Jun 30 | Balance | c/d | 949 000 | | | | |
| | | | 1 569 000 | | | | 1 569 000 |
| | | | | 20.3 Jul 1 | Balance | b/d | 949 000 |
| | | | | | | | |

**Final accounts section**
**APPROPRIATION F3**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 20.3 Jun 30 | Income tax | | 360 000 | 20.3 Jun 30 | Profit & loss | | 1 200 000 |
| | Dividends on ordinary shares | | 351 000 | | Retained income | | 460 000 |
| | Retained income | | 949 000 | | | | |
| | | | 1 660 000 | | | | 1 660 000 |
| | | | | | | | |

*# Alternative contra details possible if alternative valid intermediary accounts are used./May be processed through the Appropriation Account if retained income figures are adjusted accordingly.*

## Example 6.4 Specific identification method of inventory valuation

You are provided with information relating to AA Car Dealers. The business uses the specific identification method of valuing stock.

The following items are in stock at the beginning of May 20.3:

| | Description | Cost price | Published selling price |
|---|---|---|---|
| **Item 1** | Audi A1 (1.2 litre engine) | R170 000 | R215 000 |
| **Item 2** | Audi A3 (2.0 litre engine) | R270 000 | R324 000 |
| **Item 3** | Audi A6 (1.8 litre engine) | R330 000 | R380 000 |
| **Item 4** | Audi A8 (3.0 litre engine) | R580 000 | R650 000 |

Items 1 and 3 were sold for cash during May 20.3 at their published selling prices.

### Required:

(a) Calculate the value of trading stock on 31 May 20.3 and gross profit earned during May 20.3.

(b) Explain why it would be unreasonable for this business to value its stock items on the basis of FIFO or weighted average.

(c) Explain why it would be unreasonable for certain other businesses to use the specific identification method, e.g. a fruit shop that sells apples.

(d) AA Car Dealers do not want the cost prices of stock items to be public knowledge. What strategies could they use to keep the cost prices confidential?

### Solution:

(a) **Value of trading stock on 31 May 20.3** = R270 000 + R580 000 **= R850 000**

***NOTE:*** *Stock is valued under any of the three methods using number of units on hand and appropriate unit costs. This is a relatively simple process. A calculation using cost of sales should arrive at the same answer, but this process could be unnecessarily lengthy and complicated, and is not advised for stock valuation.*

**Gross profit earned during May 20.3**
= Sales – Cost of sales = (215 000 + 380 000) – (170 000 + 330 000) **= R95 000**

(b) **Explain why it would be unreasonable for this business to value its stock items on the basis of FIFO or weighted average.**

They sell discrete (separate) items (i.e. cars) that are very different from each other in terms of price and character. It would be inappropriate to value the cars based on the last two items bought or the weighted average as cost prices vary considerably. Also, low volumes of such large articles make it easier to identify the specific cost on each car.

(c) **Explain why it would be unreasonable for certain other businesses to use the specific identification method, e.g. a fruit shop that sells apples.**

Apples comprise numerous similar articles sold at similar prices. Cost prices might change from day to day or from supplier to supplier, the articles would all be placed in containers for customers to select. It is difficult to apply a specific price to any one apple.

(d) **AA Car Dealers do not want the cost prices of stock items to be public knowledge. What strategies could they use to keep the cost prices confidential?**

- Keep the cost prices in a catalogue which can be secured in the manager's office.
- Secret cost code, e.g. a 10-letter word such as BLACKHORSE, where B=1, L=2, etc.
- Allocate separate product numbers to each item and record them on the computer system together with the specific cost prices.

## Example 6.5 Break-even point (BEP) and Contribution per unit

**Background information:**

The calculation of the BEP includes a simple yet very significant calculation for the denominator, i.e. **Selling price** less **Variable cost per unit**. The answer to this calculation is referred to as the **Contribution per unit**.

For example, if the Selling price is R500 per unit and the Variable costs are R300 per unit, the Contribution per unit is R200. The sales value will make the profit go up, but the Variable costs will decrease profit, so the Contribution is the net effect. Learners are expected to understand that the Contribution is the net rand amount that each unit produced contributes towards covering the Fixed costs.

For the purposes of the CAPS content, all costs are either **Fixed** (i.e. Factory overheads & Administration costs) or **Variable** (i.e. Direct materials, Direct labour and Selling/Distribution costs). It must be assumed that Fixed costs will remain constant for at least one financial year, and that Variable costs are in direct proportion to the number of units produced. In other words, the CAPS do not include semi-Variable costs (this will be studied at university level).

It is important that learners also understand the logic underlying the BEP. Assume that Fixed costs are R9 000 and the contribution per unit is R200.

Then:
- If only 1 unit is produced, the loss made will be R8 800 (i.e. Fixed costs less R200).
- If 2 units are produced, the loss will be R8 600 (i.e. Fixed costs less R400).
- If 3 units are produced, the loss will be R8 400 (i.e. Fixed costs less R600), etc.
- The business will have to produce 40 units for the total Contribution to be equal to the total Fixed costs, i.e. R8 000 ÷ R200 = 40 units. This is the BEP at which the business will make no profit and no loss, i.e. it breaks even.

If this logic is properly understood, Contribution per unit can easily be used to calculate other figures. For the calculation of expected profit on additional units produced, fixed costs are irrelevant as they remain constant (i.e. there is no increase in Fixed costs due to increased production). The only relevant items are the Selling price (R500) and the Variable costs per unit (R300), which are represented by the net effect for Contribution per unit of R200. It is not necessary to calculate or use total rand amounts in this case.

For example:
- If production is 10 units ***more*** than BEP (i.e. if total production is 40 + 10 = 50 units), the expected profit will be 10 x R200 = R2 000.
- If production is 50 units ***more*** than BEP (i.e. if total production is 40 + 50 = 90 units), the expected profit will be 50 x R200 = R10 000.

Contribution per unit can also be easily used to calculate production targets. In a calculation such as this, Fixed costs are irrelevant as they remain constant (i.e. there is no increase in Fixed costs due to increased production).

For example:
- To make a profit of R2 000, ***extra*** units of production will be R2 000 ÷ R200 = 10 units (i.e. if total production is 40 + 10 = 50 units).
- To make a profit of R30 000, ***extra*** units of production will be R30 000 ÷ R200 = 150 units (i.e. if total production is 40 + 150 = 195 units).

**Refer to the worked example on the next page.**

## WORKED EXAMPLE OF BREAK-EVEN POINT & CONTRIBUTION PER UNIT:

**BB BUCKETS**

The business produces plastic buckets.

You are provided with information for the financial year ended 29 February 20.9.

**INFORMATION:**

**A. Production, sales and profit:**

- 10 000 buckets were produced during the 20.9 financial year.
- The selling price per bucket is R93,00.
- Net profit for the 20.9 financial year per the Income Statement is R280 000.

**B.**

| Cost categories | TOTAL | PER UNIT |
|---|---|---|
| **VARIABLE COSTS** | **R430 000** | **R43,00** |
| Direct materials | R240 000 | R24,00 |
| Direct labour | R130 000 | R13,00 |
| Selling & distribution | R60 000 | R6,00 |
| **FIXED COSTS** | **R220 000** | **R22,00** |
| Factory overheads | R180 000 | R18,00 |
| Administration | R40 000 | R4,00 |
| | **R650 000** | **R65,00** |

**REQUIRED:**

(a) Calculate the break-even point.

(b) Provide a calculation to show that the net profit of R280 000 is correct.

(c) Calculate:

- The increase in profit if an extra 600 buckets are produced.
- The total profit that will be earned if an additional 600 buckets are produced.

(d) Calculate:

- The number of additional units that need to be produced to increase the net profit by R75 000.
- The total number of units that need to be produced to increase the net profit by R75 000.

**Refer to the solution on the next page.**

**SOLUTION:**

**(a)** **Calculate the break-even point:**

$$\frac{R220\ 000}{R93{,}00 - R43{,}00} = \frac{R220\ 000}{R50{,}00} = 4\ 400 \text{ units}$$

**(b)** **Provide a calculation to show that the net profit of R280 000 is correct:**

(10 000 x R93,00) – R650 000 = R280 000

See (a) above
**OR:** (10 000 – 4 400) x R50 = R280 000

**(c)** **Calculate the increase in profit if an additional 600 buckets are produced:**

See (a) above
600 units x R50 = R30 000

**Calculate the total profit that will be earned if an additional 600 buckets are produced:**

See above
R280 000 + R30 000 = R310 000

**(d)** **Calculate the number of additional units that need to be produced to increase the net profit by R75 000:**

$$\frac{R75\ 000}{R50} = 1\ 500 \text{ units}$$

See (a) above

**Calculate the total number of units that need to be produced to increase the net profit by R75 000:**

10 000 + 1 500 = 11 500 units