



# JENN

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Province of the  
**EASTERN CAPE**  
EDUCATION

**SUBJECT: MATHEMATICAL LITERACY**

**GRADE 12**

**AUTUMN CLASSES**

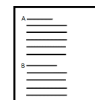
**TEACHER AND LEARNER CONTENT MANUAL**

**Topics**

**FINANCE & PROBABILITY**

- **Financial Documents (Bank Statements)**
- **Cost, Selling Price & Breakeven Analysis**
- **Taxation (PAYE)**

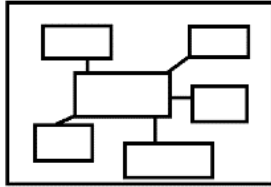
STRUCTURE OF EXAMINATION			
PAPER	TOPICS	TOTAL MARKS	WEIGHTING
PAPER 1: (FINANCE & DATA HANDLING)	Finance	±90	± 60 %
	Data Handling	±53	± 35 %
	Probability	±7	5%
TOTAL		± 4	± 32%
PAPER 2: (MEASUREMENT, MAPS, PLANS & SCALES)	Measurement	± 83	± 55%
	Maps, Plans and Scale	± 60	± 40%
	Probability	±7	± 5%
TOTAL		150	±100%
Pre-test and Post-test to be administered focuses only on Finance & Probability			



<p><b>GUIDELINES</b></p> <ul style="list-style-type: none"> <li>○ Examination Guideline</li> <li>○ Lesson Objectives</li> <li>○ Important terms and definitions</li> </ul>	<p><b>2-14</b></p>
<p><b>SECTION 1: Financial Documents (Bank Statements)</b></p> <ul style="list-style-type: none"> <li>○ Terminology/Glossary of words</li> <li>○ Outlining the key concepts</li> <li>○ Worked examples.</li> <li>○ Activities</li> </ul>	<p><b>15-19</b></p>
<p><b>SECTION 1: Cost, Selling Price &amp; Breakeven Analysis</b></p> <ul style="list-style-type: none"> <li>○ Terminology/Glossary of words</li> <li>○ Outlining the key concepts</li> <li>○ Worked examples.</li> <li>○ Activities</li> </ul>	<p><b>20-23</b></p>
<p><b>SECTION 2: Taxation (PAYE)</b></p> <ul style="list-style-type: none"> <li>○ Terminology/Glossary of words</li> <li>○ Outlining the key concepts</li> <li>○ Worked examples.</li> <li>○ Activities</li> </ul>	<p><b>24-27</b></p>

## ICON DESCRIPTION

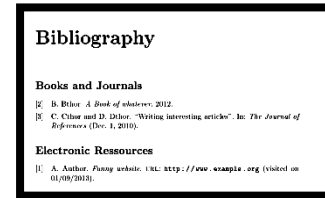
### MIND MAP



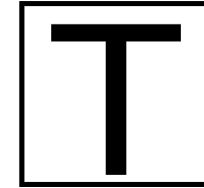
### EXAMINATION GUIDELINE



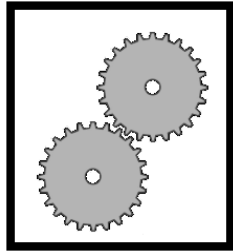
### BIBLIOGRAPHY



### TERMINOLOGY



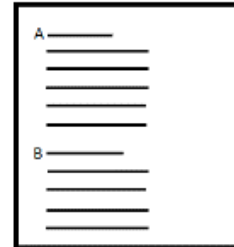
### WORKED EXAMPLES



### STEPS



### CONTENTS



### ACTIVITIES



## FINANCIAL DOCUMENTS: EXAMINATION GUIDELINES



### TOPIC: FINANCE

Section	Level 1: Knowing	Level 2: Applying routine procedures	Level 3: Applying multi-step procedures in a variety of contexts	Level 4: Reasoning and reflecting
<b>Financial Documents</b>	<ul style="list-style-type: none"> <li>• Read information directly from an electricity bill (e.g. date; name of account holder; electricity consumption for the month).</li> <li>• Show how the 'Total Due' on the electricity bill has been calculated by adding together all items listed on the bill.</li> <li>• Show how the VAT value listed on the electricity bill has been calculated when told that VAT is 14% of the value excluding VAT (that is, calculating a direct percentage of an amount).</li> </ul>	<ul style="list-style-type: none"> <li>• Use a given formula to show how the amount charged for electricity consumption shown on the bill has been determined.</li> <li>• Complete a table of values to show the cost of various quantities of electricity consumption.</li> <li>• Use the table of values to construct a graph to represent the cost of electricity consumption.</li> <li>• Increasing/Decreasing by a given percentage</li> </ul>	<ul style="list-style-type: none"> <li>• Replicate the calculations/values shown on the bill for a different electricity consumption value.</li> <li>• Without any scaffolded or guiding questions, draw a graph to represent the cost of electricity on a particular electricity system.</li> </ul>	<ul style="list-style-type: none"> <li>• Choose an appropriate strategy (e.g. tables of values, graphs, and interpreting points of intersection.) to compare the electricity costs of two different electricity systems and make a decision about which system is the most cost effective for a user with particular needs.</li> <li>• Analyse a newspaper article describing proposed increases in electricity tariffs and make deductions about the implications of these increases for consumers.</li> <li>• Rework the answer if the initial conditions change.</li> </ul>

<p><b>Cost price and selling price</b></p>	<ul style="list-style-type: none"> <li>• Determine the cost price of an item by adding together given cost values for the component parts of the item.</li> <li>• Determine the income generated from the sale of an item based on a given sales price and given sales volumes.</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Compare the difference between the cost and selling price of an item by calculating the percentage mark-up in price of the selling price from the cost price.</li> <li>• Construct a table of values to show how the cost price of an item changes depending on the number of items made.</li> <li>• Draw a graph from a given table.</li> </ul>	<ul style="list-style-type: none"> <li>• Draw graphs, without scaffolded or guiding questions, to show the costs involved in producing an item and money generated from the sale of the item.</li> <li>• Investigate, through research, the various costs involved in manufacturing an item, and decide on an appropriate selling price for the item.</li> <li>• Calculate profit if only one of income or expenses is given and the other still needs to be calculated.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct market research on a group of people and use the results of the research to defend a particular selling price for a product.</li> <li>• Interpret graphs showing the cost of production and income generated from the production and sale of an item and use the graphs to make decisions about the business (e.g. how many items must be manufactured and sold to cover all production costs).</li> </ul>
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<p><b>Break-even analysis</b></p>	<ul style="list-style-type: none"> <li>Define 'break-even' in the context in which a problem is posed (e.g. in the context of a business, 'break-even' refers to the income that must be generated to cover all expenses).</li> </ul>	<ul style="list-style-type: none"> <li>Determine the break-even point of a business from a given table of income and expenditure values.</li> <li>When given two graphs that intersect, read off the value of the independent and dependent variables at the breakeven point (point of intersection) of the graphs.</li> </ul>	<ul style="list-style-type: none"> <li>Draw two or more graphs and identify the point of intersection of those two graphs to compare different options (e.g. income vs. expenditure; cellphone contract options; electricity tariff system.).</li> </ul>	<ul style="list-style-type: none"> <li>Explain the relevance of the break-even point of two graphs in relation to the problem or context for which the graphs have been drawn.</li> <li>Explain the meaning of different regions on a graph (that is, between different points of intersection) in relation to the problem or context for which graphs have been drawn. * Rework the answer if the initial conditions change.</li> </ul>
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<p style="text-align: center;"><b>Taxation</b></p>	<ul style="list-style-type: none"> <li>• Identify the name of the employee listed on a pay slip and the month for which the pay slip has been issued. * Identify the employee's monthly salary.</li> <li>• State how the employees 'taxable income' has been determined by referring to the salary and deduction values shown on the payslip.</li> <li>• Define the terms 'gross pay', 'net pay', 'deductions', and 'taxable income' shown on a payslip.</li> </ul>	<ul style="list-style-type: none"> <li>• Read appropriate tax values from given income tax deduction tables. * Identify the income tax bracket into which an individual falls based on a given monthly and/or annual income.</li> </ul>	<ul style="list-style-type: none"> <li>• Use formulae provided on income tax bracket tables to calculate an individual's annual and monthly income tax.</li> <li>• Investigate through calculation how the tax rebate value is determined.</li> <li>• Calculate compound growth/decline.</li> </ul>	<ul style="list-style-type: none"> <li>• Compare income tax tables over different financial periods and explain how an individual's tax may have changed from one period to another.</li> <li>• Investigate the effect that an increase in salary has on increased tax payments.</li> <li>• Analyse graphs showing changes in income tax over different time periods and explain differences</li> </ul>
<p style="text-align: center;"><b>Probability</b></p>	<ul style="list-style-type: none"> <li>• Identify the percentage chance of rain for a particular town from a weather report in a newspaper.</li> <li>• State the meaning of terms associated with probability (e.g. event; outcome).</li> </ul>	<ul style="list-style-type: none"> <li>• Express the probability of an event using fraction, percentage and decimal notation.</li> <li>• Identify all of the possible outcomes of a particular event (e.g. rolling a dice; gambling game).</li> <li>• Explain whether or not a particular</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct an experiment to compare the experimental probability of an event to its theoretical probability.</li> <li>• Identify appropriate values from a given table of data values (e.g. on motor vehicle fatalities in South Africa) and</li> </ul>	<ul style="list-style-type: none"> <li>• Analyse a table of rainfall data for a town and make predictions about the chance of rain in that town during a particular month during the year.</li> <li>• Explain whether the statement 'if I take the same lottery numbers every week then my chances of winning increase' makes sense.</li> </ul>



		<p>rainfall prediction indicates that it is more or less likely to rain.</p>	<p>express the probability of certain events shown in the table.</p> <ul style="list-style-type: none"> <li>• Develop a game involving probability and play the game with another learner in the class.</li> <li>• Design simple contingency tables and use them to calculate probabilities. * Draw tree diagrams and use them to calculate probabilities</li> </ul>	<ul style="list-style-type: none"> <li>• Critique the use of references to probability values in newspaper articles.</li> <li>• Analyse a table showing risk assessment profiles of people in different age groups and explain why particular age groups are classified as higher risks than others.</li> <li>• Analyse a game involving probability and make a deduction about the fairness of the game.</li> </ul>
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## LESSON OBJECTIVES

At the end of this module, you will be able to:

### **Financial Documents**

- Understand terminology used in the bank statement.
- Read and analyse and interpret information in the bank statement .

### **Cost, Selling Price and Breakeven Analysis**

- Understand terminology used in budget, income, and expenditure statements.
- Perform the calculations involving cost, selling price and breakeven analysis.

### **Taxation (PAYE)**

- Understand terminology used in taxation.
- Working with tax tables income brackets and formulae.
- Know how to calculate taxable income and personal tax.
- Know how to interpret the impact of salary increase in personal income tax.

### **Expression of Probability (integrated)**

- Express probability in different forms



## IMPORTANT TERMS AND DEFINITIONS

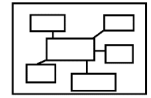
### FINANCIAL DOCUMENTS (BANK STATEMENT)

<b>Account</b>	A record of income and expenditure.
<b>Bank Statement</b>	The details of all the transactions made from one bank account in each period.
<b>Opening Balance/Balance brought forward</b>	The amount of money that appears in the bank statement at the beginning of the financial period.
<b>Closing Balance</b>	The amount of money that appears in the bank statement at the end of the financial period.
<b>Credit</b>	The amount of money that shows a payment made into the account and ready to spend.
<b>Debit</b>	The amount of money in an account removed from an account.
<b>Debit order</b>	An agreement between you and a company or individual take funds/money from your account.
<b>Stop order</b>	An agreement between you and your bank to make a of future-dated repeat payments on your behalf.
<b>Service Fee</b>	A fee collected to pay for services that relate to a product or service that is being purchased or rendered.
<b>Overdraft</b>	The amount of money in your account given by a bank to withdraw or cover transactions in case you don't have enough or sufficient money/funds.
<b>Interest</b>	Money paid regularly at a particular rate for the use or loan of money or money borrowed from the organisation/financial institution.
<b>Interest rate</b>	This is the % rate of interest that will be charged on your loan amount, i.e. a percentage value of the original loan amount.
<b>Bank Charges</b>	Amount of money paid by a customer for a bank's services.

<b>Withdrawal</b>	Money taken out of a bank account.
<b>Deposit</b>	A payment made into a bank account
<b>COST, SELLING PRICE &amp; BREAKEVEN ANALYSIS</b>	
<b>Budget</b>	A plan of how to spend money or an estimate of income and expenditure
<b>Income</b>	The amount of money received for work done, investments or providing services as well as products.
<b>Fixed Expenses</b>	These are amounts that must be paid every month and stays the same for a period, like rent, school fees and transport costs.
<b>Variable Expenses</b>	Expenses that change over time or from one week/month to the other but the amount changes e.g. telephone and electricity costs.
<b>Variable Income</b>	an amount of money a person receives, and it changes over time, or changes according to the situation
<b>Fixed Income</b>	An amount of money a person receives, which does not change with time. Salaries and wages are examples of fixed income
<b>Expenditure</b>	The total amount of money that an institution/individual or person spends.
<b>Profit</b>	A financial gain, especially the difference between the amount earned and the amount spent in buying, operating, or producing something.
<b>Surplus</b>	An excess of something, or an amount remaining once the demand for the item has been met
<b>Loss/Deficit</b>	The difference between total income and total expenditure (where expenses are higher than income)
<b>EFT</b>	Electronic Funds Transfer
<b>ATM</b>	Automated Teller Machine, you can withdraw money, check your balance, or even transfer funds at an ATM.
<b>TAXATION (PAYE)</b>	
<b>Salary</b>	A fixed amount of money paid by an employer to an employee for work done over some longer period – usually per month or per year. .

<b>Taxable Income</b>	It is the amount of income used to calculate how much tax an individual or a company owes to the government in a given tax year.
<b>Gross Income</b>	The total amount of all an individual's income before deductions.
<b>Nett Income</b>	The amount an employee "takes home" after income tax has been deducted
<b>Employer</b>	A person, company, or organization that pays people to work for them.
<b>Employee</b>	a person who is paid to work for an individual, company or institution.
<b>Tax Rebate</b>	A refund on taxes when the tax liability is less than the taxes paid. An amount of money that is paid back to you if you have paid too much tax.
<b>Tax Threshold</b>	An income below which you do not pay any income tax
<b>PAYE</b>	Pay As You Earn. If you are an employee, you normally pay tax through PAYE
<b>IRP5</b>	An IRP5 is a certificate of various earnings and fringe benefits. It includes the tax paid and taxpayers' details for any given tax year.
<b>SARS</b>	South African Revenue Services
<b>UIF</b>	Unemployment Insurance Fund. Gives short-term relief to workers when they become unemployed or are unable to work because of maternity, adoption and parental leave, or illness
<b>GEPF</b>	Government Employees Pension Fund. A fund that manages pensions and related benefits on behalf of government employees in South Africa.
<b>EXPRESSION OF PROBABILITY</b>	
<b>Probability</b>	How likely an event is to happen.

# FINANCE



**Bank/Account  
Statements**

**Cost, Selling  
Price and  
Breakeven  
Analysis**



**Taxation**

**Probability**

## Worked Example 1 (Bank Statement)

4.2 Gauteng Prep 2021

- 1.1 Mrs McKenzie and her family went to Starland to do some stargazing while they were in Sutherland. John, the owner, bought the property just outside Sutherland as an investment in 2015. He organises a stargazing tour on his property each evening.

Starland has an FNB Business Account, which charges the following service fees:

FNB Business Account: Pay-as-you use pricing option	
Transaction	Service Fee
Monthly Account Fee	R200
<b>Cash deposit fee at FNB branch</b>	
Minimum fee per deposit of less than R5 000	R30,00
<b>Value of deposit</b>	<b>Deposit fee at FNB of more than R5 000</b>
R5 000 – R14 999,99	R5 000 – R14 999,99

- 1.1.1 What is the monthly account fee on this account?

**R200** (2)

- 1.1.2 When will the client have to pay the R30,00 minimum fee?

**Minimum fee of R30 when you make a deposit** (2)  
**OR**  
**When you make a deposit at FNB bank**  
**OR**  
**When you make a deposit of less than R5 000**

- 1.1.3 Calculate the total cost, in bank fees, to the business when John deposits R11 300,00 at an FNB branch.

$$\begin{aligned} & R8,40 + (R1,49) \times \frac{R11\,300}{100} \\ & = R8,40 + R163,37 \\ & = R176,77 \end{aligned} \quad (2)$$

- 1.3.4 The FNB Business account pays 2,4% interest per annum. The interest is compounded monthly.

- a) Calculate the monthly interest rate. (3)

$$\frac{2,4\%}{12} = 0,2\% \quad \text{OR} \quad \frac{24\%}{100} = 0,024\%$$

- b) Calculate how much interest John will earn on R11 300,00 if he cashes out his account in 2 months.

Month 1:

$$R11\ 300 \times 0,002 = R22,60$$

$$R11\ 300 + R22,60 = R11\ 322,60$$

(5)

Month 2:

$$R11\ 322,60 \times 0,002 = R22,6452$$

$$R22,60 + R22,65 = R45,25$$

(14)





## Activity 1 (Bank Statements)

Jenn Manual

- 1.1 Nwabisa is a client of Nombo Bank. She received her monthly bank statement for transactions she has made in January 2023. Nwabisa statement for January 2023 is given below.

BANK STATEMENT				
<b>Ms Nwabisa Mkhuhlane</b> 41 Ottoman Street Gompo Town East London 5209		<b>NOMBO Bank</b> Hemingways Branch P.O Box 1456 East London 5209		
2 February 2023				
Statement period: 01 January 2023 to 28				
<b>Account number:</b> 1258 3598 1257				
<b>Type:</b> Cheque Account				
Date	Details	Debit	Credit	Balance
1	Balance			R11 380,00 Cr
4	Cash deposit		R1 900,00	R13 280,00 Cr
6	Cash handling fee	R 14,50		R13 265,50 Cr
12	Inter-account transfer: savings account 0215875		R7 450,00	R20 715,50 Cr
20	Internet transfer T.Kotze		R 870,00	R21 585,50 Cr
28	Transaction fees	R 25,30		R21 560,20 Cr
30	Stop order insurance	R 350,00		R21 210,20 Cr
31	Interest Paid		R 120,00	R21 330,20 Cr
31	Bank interest	R 58,75		R21 271,45 Cr
31	Service fees	R 30,25		R21 241,20 Cr
	Internet transfer	R 20 480,00		R 761,20 Cr
31	Deposit Salary		R5 312,60	R 6 073,80 Cr

- 
- 1.1.1 Determine the opening balance in the account (2)
- 1.1.2 Write down the date when the statement was issued. (2)
- 1.1.3 Calculate the total amount of the bank fees that Nwabisa has to pay at the end the month. (2)
- 1.1.4 Show how the amount of R761,20 was calculated. (2)
- 1.1.5 On January 4, Nwabisa made a cash deposit of R1 900,00 into her account. Calculate the percentage of this amount charged by the bank as cash handling fee. (3)
- 1.1.6 What is the probability of Nwabisa making a cash withdrawal from her bank account? (2)
- (13)**

## **Activity 2 (Account Statement)**

2.1 KZN 2023 Preparatory

- 2.1 Mr. G Ngwane received his clothing account statement from Truworths. ANNEXURE A shows an extract of his clothing account statement.

Use ANNEXURE A to answer the questions that follow.

- 2.1.1 Define the term credit in the given context. (2)
- 2.1.2 Write down the payment due date. (2)
- 2.1.3 Use the balance brought forward and transactions to show how the balance amount of R14 170,66 was determined. (3)
- 2.1.4 Calculate (rounded off to ONE decimal place) the interest as a percentage of the amount due on the statement. (3)
- (10)**

## Annexure A

## Activity 2: Account Statement

Truworths Limited CIPC Reg. no. 1940/013923/06  
Truworths is a registered credit provider no. NCRCP45

**STATEMENT**

# TRUWORTHS

**MR G NGWANE  
PRIVATE BAG X108  
EMPANGENI**

**3880**

<b>DATE:</b> 11 December 2022	
<b>YOUR ACCOUNT NUMBER</b>	
10100*****	
<b>ACCOUNT LIMIT</b>	<b>YOU CAN BUY FOR</b>
R13 150,00	R0,00
<b>ARREARS</b>	<b>INSTALLMENT</b>
R0,00	R1 271,57
<b>Your amount due is R1 271,57</b>	

Statements are accepted as correct unless queried in 60 days.

**YOUR BALANCE BROUGHT FORWARD**

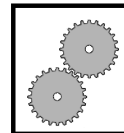
**R10 825,30**

DATE	TRANSACTIONS	DEBITS/CREDITS
14 November 2022	DQ- 644 Payment - Thank You	1 100,00 CR
	<b>6 MONTHS INTEREST FREE</b> Closing Plan Balance	91,57
	<b>12 MONTHS - INTEREST BEARING</b>	
28 November 2022	1029378 Empangeni	899,00
07 December 2022	1017211 Gift Card Purchase	1 000,00
10 December 2022	1021061 Empangeni	1 930,00
10 December 2022	2010055 E-Commerce Web Store	205,00
10 December 2022	2019951 E-Commerce Web Store	199,00
12 December 2022	Interest	212,36
	Closing Plan Balance	14 079,09
<b>BALANCE AS AT 11 DECEMBER 2022</b>		<b>R14 170,66</b>
<b>PAYMENT DUE DATE:</b> 04 January 2023		<b>AMOUNT DUE</b>
		<b>R1 271,57</b>

### PAYMENT METHODS

1. Pay online with a cheque or credit card.
2. ATM or Electronic Funds Transfer (EFT).
3. Pay at any Truworths store

[Adapted from Ngwane Account Statement]



## Worked Example 1 (Cost, Selling Price and Breakeven Analysis)

- 1.1 Abel is a metered taxi driver. His company charges the following fare for a single trip:
- A minimum call-out fee of R50 per trip with the first THREE kilometres being free.
  - Thereafter, R15,00 for each additional kilometre or part thereof.
  - The company charges an extra R200,00 per hour if the taxi must wait for a client and the trip will be charged as a single trip.

TABLE 7 below shows the total cost per single trip for different distances travelled.

**TABLE 7: TOTAL COST PER SINGLE TRIP FOR DIFFERENT DISTANCES TRAVELLED**

Distance (in km)	0	1	3	5	10	20	30
Total cost per single trip (in rands)	0	50	50	80	A	305	455

Use TABLE 7 and the information above to answer the questions that follow.

- 1.1.1 Explain the meaning of the term single trip in this context.

**A Single trip is a trip taken by taxi to a particular destination without going back (i.e. no return)./ 'n Enkelrit is 'n rit wat per taxi na 'n spesifieke bestemming geneem word sonder om terug te gaan** (2)  
**OR/OF**

**A Single trip is a trip taken by taxi from a pick-up point to a destination. 'n Enkelrit is 'n rit wat per taxi vanaf die optelpunt tot eindpunt.**

- 1.1.2 Calculate the value of A.

$$\begin{aligned} A &= R50 + (10\text{km} - 3\text{km}) \times R15 \\ &= R50 + R105 \\ &= R155 \end{aligned} \quad (3)$$

- 1.1.3 Write down an equation that Abel can use to calculate the total cost (in rands) per single trip, in the form:

$$\text{Total cost (in rands) per single trip} = R50 + (\text{number of km} - 3\text{km}) \times R15 \quad (2)$$

1.1.4 A client pays Abel R1 505 for a single trip. Determine the total distance (in km) travelled during this trip. (5)

1.1.5 Doris hires a taxi from this company to take her to a meeting venue 20 km from her home. The meeting is scheduled to take exactly ONE hour, and she requests that the taxi wait for her to take her back home. Doris claimed that it was going to be cheaper for her if she could have called the taxi back after her meeting, instead of making it wait for her.

Verify, showing all calculations, whether her claim is valid.

**Total cost for taxi waiting for /totale koste van taxi wat wag vir Doris  
= R305 + R200  
= R505**

**Total cost for Doris calling the taxi back/Totale koste wanneer Doris  
die taxi laat terugkom = R305 × 2  
= R610**

**Her claim is not valid/Haar bewering is nie geldig nie**

(6)

### Activity 1 (Cost, Selling Price and Breakeven Analysis)

FS Xhariep Informal tasks

1.1 Susan started her business one month later and because of the price increase of products, it then cost her R9,50 to make ONE cup of Milo. She calculated that the daily fixed cost was R90,00 and she would be able to sell 100 cups of Milo per day. She will sell the Milo at R12,50 per cup.

Use the information above to answer the questions that follow.

1.1.1 TABLE 1 shows the income from the sale of cups of Milo.

**TABLE 1: INCOME FROM THE SALE OF CUPS OF MILO**

<b>Number of Milo cups (n)</b>	0	20	30	40	80	100
<b>Income (in rands)</b>	0	250	375	<b>P</b>	1000	1250

a) Determine the value of **P** in TABLE 2 above. (2)

b) Write down an equation that can be used to calculate the income. (2)

c) Identify the independent variable in TABLE 2. (2)

- 1.1.2 Susan uses the following formula to determine the cost price of the cups of Milo.

$$\text{Cost} = R90,00 + R9,50 \times n \text{ where } n = \text{number of cups of Milo}$$

TABLE 3 shows the cost price for a number of cups of Milo.

**TABLE 2: COST PRICE OF A NUMBER OF CUPS OF MILO**

Number of Milo cups (n)	0	20	30	Q	80	100
Cost Price (in rands)	90	280	375	612,50	850	1 040

Calculate the value of Q in TABLE 2 above.

- 1.1.3 The graph on ANSWER SHEET 1 shows the total income for making up to 100 cups of Milo. Use the information in TABLE 3 to draw another graph representing the cost from the selling of up to 100 cups of Milo. (2)

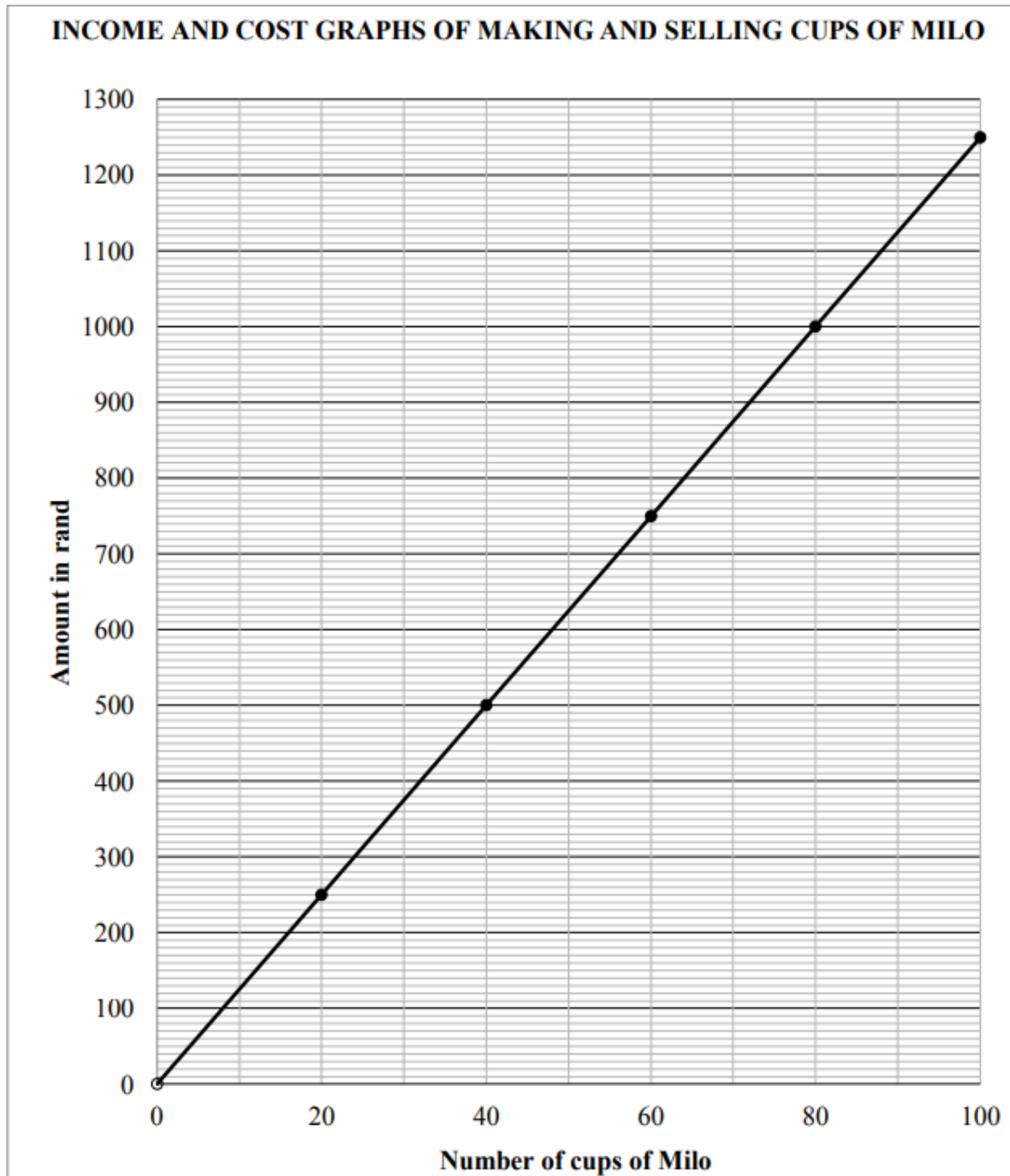
- 1.1.4 Use the tables or graphs on ANSWER SHEET 1 to answer the following questions.

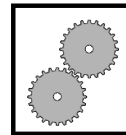
- a) Explain the meaning of the word break-even in the context of the Question. (2)
- b) Determine the number of cups of Milo at the break-even point (2)

(12)

**ANSWER SHEET 1**

**QUESTION 1.1.3**





## Worked Example 1 (Taxation)

2.1 Gauteng Preparatory 2021

1.1 Mrs Ndlovu, who is 58 years old, earns a monthly income of R60 000. Each month she contributes the following from her monthly income:

- Medical aid for herself, her husband and two children.
- 7,5% of her basic income is contributed to a pension fund.
- 1% of her basic income is contributed to the UIF (max. R148,72).

Use the tax table on ANNEXURE A in the ADDENDUM to answer the questions that follow.

1.1.1 Explain what the tax threshold for people 65 years and younger means to a taxpayer.

**It means that people 65 years and younger, receiving an annual income of R83 100 or less, does not have to pay tax.** (2)

1.1.2 Calculate Mrs Ndlovu's annual taxable income

**Income – pension – UIF = taxable income**  
**R60 000 - (7,5% × 60 000) – R148,72 = R55 351, 28**  
**R55 351, 28 × 12 = R664 215, 36** (5)

1.1.3 Determine Mrs Ndlovu's annual medical aid tax credits.

**(R319 × 2) + (R215 × 2) = R1 068 per month**  
**R1 068 × 12 = R12 816 per year** (4)

1.1.4 Mrs Ndlovu stated that her monthly tax contribution is R 9 111,75. Verify, showing ALL calculations, whether her statement is valid.

**R155 505 + 39% (R664 215,36 – R584 200)**  
**R155 505 + R31 2015,99**  
**R186 710,99**  
  
**R186 710,99 – R14 958 = R171 752,99**  
**R171 752,99 – R12 816 = R158 936,99**  
  
**R158 935,99 ÷ 12 = R13 244,75** (8)  
**No, her claim is NOT VALID**



<b>Tax Table</b>		<b>Annexure A Worked Example 1</b>
<b>Taxable Income</b>	<b>Tax Rate</b>	
R0-R205 900	18% of taxable income	
R205 901-R321 600	R37 062 + 26% of taxable income above R205 900	
R321 601-R445 100	R67 144 + 31% of taxable income above R321 600	
R445 101-R584 200	R105 429 + 36% of taxable income above R445 100	
R584 201-R744 800	R155 505 + 39% of taxable income above R584 200	
R744 801-R1 577 300	R288 139 + 41% of taxable income above R744 801	
R1 577 301 and above	R559 464 + 45% of taxable income above R1 577 300	

### **Tax Threshold**

- R83 100 for taxpayers younger than 65
- R128 650 for taxpayers aged 65 to 74
- R143 850 for taxpayers aged 75 and over

### **Rebates**

- R14 958 per year for all individuals
- R8 199 for taxpayers aged 65 and over
- R2 736 for taxpayers aged 75 and over

### **Medical tax credits**

- R319 per month per beneficiary for the first two beneficiaries
- R215 per month for each additional beneficiary

**Activity 1 (Taxation)**

DBE SC May-June 2023

1.1 Katlego (who is 24 years old) has two jobs: one at the PYEI and the other at a retail store.

He earned a combined annual taxable income of R87 329 for the 2021/2022 tax year.

TABLE 4 shows the personal income tax rates, tax rebates and tax thresholds for 2021/2022.

**TABLE 4: PERSONAL INCOME TAX RATES, TAX REBATES AND TAX THRESHOLDS FOR 2021/2022**

**TAX RATES 2021/2022**

TAXABLE INCOME (R)	RATES OF TAX (R)
R0–R216 200	18% of each R1
R216 201–R337 800	R38 916 + 26% of the amount above R216 200
R337 801–R467 500	R70 532 + 31% of the amount above R337 800
R467 501–R613 600	R110 739 + 36% of the amount above R467 500

**TAX REBATES 2021/2023**

Primary (below 65)	R15 714
Secondary (65 and older)	R8 613
Tertiary (75 and older)	R2 871

**TAX THRESHOLDS 2021/2022**

Below age 65	R87 300
Age 65 to age 74	R135 150
Age 75 and older	R151 100

[Adapted from [www.sars.za](http://www.sars.za)]

Use TABLE 4 and the information above to answer the questions that follow.

1.1.1	Calculate Katlego's annual tax payable for the 2021/2022 tax year.	(4)
1.1.2	Define the term tax rebate.	(2)
1.1.3	Show that the tax threshold for age 65 to age 74 in the table is CORRECT.	(5)
		<b>(11)</b>

## Activity 2 (Taxation)

Q4.1 Limpopo Sept 2023

2.1 Leon aged 75, earned an annual income of R1 225 000 for the financial year ending on 28 February 2023.

- He contributed 7,5% of his annual income towards pension fund.
- He donated R100 000 to his neighbouring school.

TABLE 4 below shows tax table for the 2022/2023 tax year.

**TABLE 4: INCOME TAX RATES FOR THE 2022/2023 TAX YEAR**

Taxable Income	Tax Rate
R0-R226 000	18% of taxable income
R226 001-R353 100	R40 680 + 26% of taxable income above R226 000
R353 101-R488 700	R73 726 + 31% of taxable income above R353 100
R488 701-R641 400	R115 762+ 36% of taxable income above R488 700
R641 401-R817 600	R170 734 + 39% of taxable income above R641 400
R817 601-R1 731 600	R239 452 + 41% of taxable income above R817 600
R1 731 601 and above	R614 192+ 45% of taxable income above R1 731 600

REBATES (2022/2023)	
Primary	R16 425
Secondary (65yrs and older)	R 9 000
Tertiary (75yrs and older)	R 2 997

[Adapted from www.sars.za]

Use TABLE 4 and the information above to answer the questions that follow.

- 2.1.1 Determine the amount Leon contributes towards pension fund (2)
- 2.1.2 Calculate Leon's taxable income (2)
- 2.1.3 Determine the amount of annual tax Leon must pay for 2022/2023 tax year. (8)

**(12)**

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