Province of the
EASTERN CAPE
EDUCATION

JOE GQABI DISTRICT



GRADE 12



MATHEMATICAL LITERACY

MARCH TEST 1

Stanmorephysics.com

11 MARCH 2025

MARKS: 75

DURATION: 1 HOUR 30 MIN

This paper consists of 8 pages .

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FIVE questions. Answer all questions.
2. Use the attached ANSWEER SHEET to answer the QUESTION 3.4.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Number the answers correctly according to the numbering system used in this question paper.
5. Start each question on a new page.
6. Show ALL calculations clearly.
7. Write neatly and legibly.



QUESTION 1

Below is a partially completed (i.e., some information not shown) copy of a pay slip of an employee at an unspecified company.

TABLE 1: EXTRACT OF A COPY OF AN EMPLOYEE's PAY SLIP

Pay & Allowances	Amounts (R)		Deductions	Amounts (R)
Basic pay	5 000		PF-Counter	150
House Rent	450		Other Deductions 2	260
Conveyance	600		EOB1-Deduction	300
CLA	340		Others	6
Medical	230			
Others	70			
Special income	1 200			
Over Time	1 400			
Bonus	**A**			
Gross Total	**11390**		**Total Deductions**	**B**
Net Salary				**C**

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Source: www.interest.com

Use information above to answer the questions that follow.

1.1 Determine the Bonus (A) amount received by the employee. (3)

1.2 Calculate the Total deductions (B). (2)

1.3 Calculate the net salary credited to the employer' s account (C). (2)

1.4 Explain the term "employee" used above. (2)

1.5 Write the ratio of special amount income to EOBI-Deduction in the form 1: .... (2)

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QUESTION 2

Indabele, a 33-year old Auditor earns a Gross Monthly salary of R 45 544.78. He contributes 7.5% of his salary towards pension fund. He is a member of a medical aid, his wife, two daughters and one son. He normally donates R25 000 to a registered charity organisation annually. This donation is a Tax- deductible expense.

TABLE 2: TAX RATES FOR THE 2024/2025 TAX YEAR

2024 / 2025 Tax Year:	
Taxable Income (R)	**Rates of Tax**
0 – 237 100	18% of taxable income
237 101 – 370 500	42 678 + 26% of taxable income above 237 100
370 501 – 512 800	77 362 + 31% of taxable income above 370 500
512 801 – 673 000	121 475 + 36% of taxable income above 512 800
673 001 – 857 900	179 147 + 39% of taxable income above 673 000
857 901 – 1 817 000	251 258 + 41% of taxable income above 857 900
1 817 001 and above	644 489 + 45% of taxable income above 1 817 000

Rebates	**Value**	**Tax Threshold**
Below age 65	R17 235	R95 750
Age 65 to below 75	R9 444	R148 217
Age 75 and over	R3 145	R165 689

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Monthly Medical Aid Tax Credits	
Principal member	R364
First dependant	R364
Each additional dependant	R246

[source:https://onlinetax.sagesouthafrica.co.za/Mobi/Home/TaxTables]

Use TABLE 2 above to answer the questions that follow.

2.1 Which institution is responsible for collecting tax? (2)

2.2 Show by means of calculations that the tax threshold for a person below 65 is correct. (3)

2.3 Determine Mr Indabele's annual taxable income (5)

2.4 Indabele state that his monthly tax payable is R 6387.47. Verify, showing all calculations whether his statement is valid. (6)

[16]

QUESTION 3

3 The Ilima tuck-shop sells fat cakes bought from Mama D's bakery at R3.00 each. They sell each fat cake for R5.00. Mimi who is employed to run the tuck-shop uses the school bakkie to fetch the fat cakes. The cost of petrol for the bakkie every month is R500.00 and she is paid R1 000.00 every month.

3.1 Calculate the school's fixed expenses (2)

3.2 The equation to find the selling price is given as: (3)

$\textbf{Income (R)} = \textbf{R5} \times \textbf{n}$; where n represents the number of fat cakes sold

Find the equation for the school's expenses:

$\textbf{Cost (R)} = \cdots$

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3.3 The **TABLE 3** below shows the cost and selling price of fat cakes. Study and answer the questions that follow:

No of fatcakes	0	500	1000	**A**	1800	2000
Cost (R)	1500	3000	**B**	5100	6900	7500
Income (R)	0	2500	5000	6000	9000	**C**

Find the values of:

3.3.1 A (2)

3.3.2 B (2)

3.3.3 C (2)

3.4 Mimi would like to see a graphical representation of the income versus the cost they have incurred.

3.4.1 Using your table in QUESTION 3.3, draw and clearly label the Cost graph on the Answer sheet provided. (4)

3.4.2 Mimi claims that for her to recover their expenses and make profit, she should sell more than 750 fat cakes. Use the graph to verify whether her claim is valid or not. (2)

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QUESTION 4

Paul who lives in Umhlathuze district municipality uses the table below to determine residential Electricity consumption for 2019/2020 financial year.

TABLE 1: RESIDENTIAL ELECTRICITY CONSUMPTION CHARGES

BLOCK	Range (kWh)	Charge/ kWh (Excl. VAT)	Charge/ kWh (Incl. VAT)
1	0 - 50	0,7298	0,8393
2	51 – 350	0,9373	1,0779
3	351 – 600	**A**	1,5351
4	601 – 1 500	1,3961	1,6055
5	> 1 500	1,5931	1,8321

[Source: www.umhlathuze.gov.za]

NOTE: VAT is 15%

Use the information above to answer the following questions:

4.1 What does the abbreviation VAT stand for? (2)

4.2 Calculate the value of A. (3)

4.3 End of January 2020 Paul paid R861, 50 including VAT. Calculate the amount of electricity consumed. (8)

4.4 Tshepo came across the following option as he was shopping for a new cell phone



- Monthly subscription = R279,00
- Free 50 minutes
- Calls cost R0,99 per minute

4.4.1 Calculate the total amount Tshepo will pay if he used 75 minutes on a particular month. (3)

You may use the following formula:

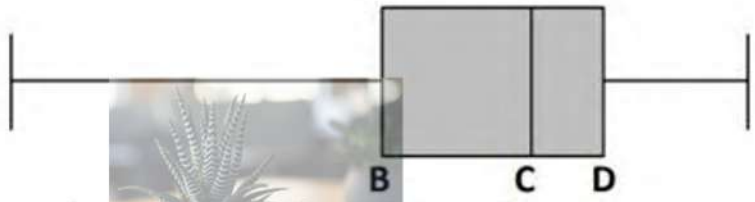
Total amount = Subscription fee + (Total minutes – free minutes) × tariff

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QUESTION 5

The majority of Metro High School learners who committed violent incidents were Grade 9 boys. The arranged ages of these Grade 9 boys and a corresponding box - and-whisker plot is given below.

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[Adapted from the South African school administration and management system]

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5.1 Determine the missing value A if the range of the ages of the Grade 9 boys who committed violent incidents is 5 years. (2)

5.2 Determine the mean age of the Grade 9 boys who committed violent incidents. (4)

5.3 Determine the missing quartiles values **B, C** and **D** of the box- and whiskers diagram. (6)

5.4 A grade 9 boy who committed a violent act is randomly selected. (3)

Determine the probability expressed (in decimal form) that the boy will be 16 years and above

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ANSWERSHEET

QUESTION 3.4.1

LEARNER NAME:……..

