



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA



DEPARTMENT OF
EDUCATION

CAPRICORN SOUTH DISTRICT

Stanmorephysics.com

MATHEMATICAL LITERACY

GRADE 10

INVESTIGATION

Stanmorephysics.com

ISSUING DATE: 09 FEBRUARY 2024

ACTUAL WRITING: 14 FEBRUARY 2024

MARKS: 50

This question paper consists of 06 pages including the cover page.

INSTRUCTION AND INFORMATION

1. This question paper consists of THREE questions. Answer ALL the questions.
2. Number the questions correctly according to the numbering system used in this question paper.
3. Start EACH question on a NEW page.
4. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
5. Show ALL calculations clearly.
6. Round ALL the final answers appropriately according to the context, unless stated otherwise.
7. Indicate units of measurement, where applicable.
8. Write neatly and legibly.

QUESTION 1

- 1.1 In TABLE 1 below is a list of explanations and definitions of concepts used in Mathematical Literacy.

TABLE 1: USE THE TABLE BELOW TO MATCH COLUMN A WITH COLUMN B

1.1.1	Percentage	A ratio between two quantities measured in different units. It describes how the one quantity changes in relation to the other.
1.1.2	Ratio	When we write numbers, we leave a space to indicate thousands.
1.1.3	Rate	The different ways by which numbers can be written
1.1.4	Thousand separator	A relationship two or more quantities
1.1.5	Word format	It means part of a hundred.

(10)

- 1.2 Teko Modise is a professional football player. He earns R865 342 per year.

- 1.2.1 Write R865 342 in words.

(2)

- 1.2.2 Teko has opened a savings account, and transactions has been made throughout the month. At the end of the month her closing balance was –R500.00.

(2)

Explain the difference between R500.00 and –R500.00 on Teko's bank statement.

- 1.2.3 For Teko to improve his money into his savings account, he sold 1 600 bags of oranges in 2023, he would like to increase his sales by 8% next year. How many bags must he sell in 2024?

(2)

[16]

QUESTION 2

Mrs. Smart bought groceries at Food and lover's market and received the following till slip. Study the till slip below and answer the following questions:-



MOKOPANE

26 Voortrekker Road – Mokopane

Tel No. : 015 491 0778

VAT NO. 4620215469

TAX INVOICE

85

BANANA LS

0.726kg NET @ 24.99/kg 20.04#

BLUEBERRIES PP 125G 30.00#

CLOVER MILK NOLAC UHT 2l 36.90#

F/L RECLINED C/BAG

2 @ 1.00 each 2.00

H/CONN CHIA SEEDS 40B 109.99#

STRAWBERRY 250g

2@ 30.00 each 60.00

TOTAL 258.93

TJ FET 258.93

CHANGE 0.00

VAT SUMMARY

Description	NET	VAT	TOTAL
#Non VAT	146.94	0.00	146.94
VAT	97.38	14.61	111.99
VAT TOTALS	244.32	14.61	258.93

CASHIER : CANDICE

C/007#7875 12:26

30/10/2023

S91318R007

Thank you for your patronage

Customer Care: care@fny.co.za

Customer Care: 086 007 728

Use the information on the slip above to answer the questions that follow.

- 2.1 How are zero rated items indicated on a slip? (2)
 - 2.2 Explain how the final amount the client must pay("balance due") calculated (2)
 - 2.3 Round off the amount R258, 93 to the nearest hundred rand. (2)
 - 2.4 Show through calculation, the total of the goods that include VAT is 119.99 (4)
 - 2.5 Write down the item(s) that are zero rated. (2)
- [12]**

QUESTION 3

- 3.1 Ms, Vorster retired at the end of 2023. She received R1 101 046 from her pension fund. She decided to split R500 000.00 for her three daughters aged 28, 23 and 18. The amount must be split according to the following ratio **3: 4 : 5** respectively.

Use the above information to answer the following questions:

- 3.1.1 Calculate the amount that each of the daughters will receive and the answers must be converted to the nearest rand (8)
- 3.1.2 Mrs. Vorster did not share the amount equally amongst her children. Which daughter must receive more money and why? (4)
- 3.2 Benjamin wants to buy a smart UDH TV costing almost R30 000. According to the instalment sale agreement, she must pay a 10% deposit and then pay off the balance in equal instalments for 36 months.



Use the information above to answer the questions below

3.2.1 Determine the original price of the TV. (2)

3.2.2 Calculate the deposit Benjamin needs to pay.

You may use the following formula:-

$$\text{Deposit} = \text{Percentage} \times \text{The original price of TV} \quad (3)$$

3.2.3 Determine the amount he is required for his monthly instalments.

You may use the following formula:-

$$\text{Monthly Instalment} = \frac{\text{Total Amount after deposit was deducted}}{\text{number of months to pay the instalment}} \quad (3)$$

3.2.4 Would you advice Benjamin to buy the TV on cash or instalment? Give a reason for your answer. (2)

[22]

GRAND TOTAL: 50





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GRADE 10

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2024 INVESTIGATION

MARKING GUIDELINES

MARKS: 50

The memorandum consists of 04 pages

QUESTION 1[16]		
1.1.1	Percentage- It means part of a hundred. ✓✓A	2A for the answer (2)
1.1.2	Ratio- A relationship between two or more quantities. ✓✓A	2A for the answer (2)
1.1.3	Rate- A ratio between two quantities measured in different units. It describes how one quantity changes in relation to the other. ✓✓A	2A for the answer (2)
1.1.4	Thousand separator- When we write numbers, we leave a space to indicate thousands. ✓✓A	2A for the answer (2)
1.1.5	Word format- The number of ways by which numbers can be written ✓✓A	2A for the answer (2)
1.2.1	Eight hundred and sixty five thousand, three hundred and forty two. ✓✓A	2A for answer with correct spelling (2)
1.2.2	R500 means that there is money in the account. ✓✓A -R500 means there is no money in the account. ✓✓A	2A for the answer (2)
1.2.3	$\text{Percentage increase} = 8\% \times R1\ 600 + R1\ 600$ $= 0.08 \times R1\ 600 + R1\ 600 \checkmark \text{MA}$ $= R128 + R1\ 600$ $= R1\ 728 \checkmark \text{A}$	1MA for adding correct values 1A for the answer (2)
		[16]

QUESTION 2 [11]		
2.1	They are indicated by a hash tag. ✓✓A	2A for correct answer (2)
2.2	The final amount is R258. 93. ✓✓A	2A for correct answer (2)
2.3	R300✓✓A	2A for the answer (2)
2.4	$A = R111.99 - R14.61$ ✓✓MA $= R97,38$ ✓CA	2MA for subtracting the correct values 1CA for the answer (3)
2.5	Zero rated items are:- Bananas - Clover milk - Strawberry	2A for mentioning any two items (2)
		[11]
QUESTION 3 [23]		
3.1 .1	$3 + 4 + 5 = 12$ ✓A $\text{Daughter 1} = \frac{3}{12} \times R500\ 000$ ✓✓MA $= R125\ 000.00$ ✓CA $\text{Daughter 2} = \frac{4}{12} \times R500\ 000.00$ $= R166\ 666.67$ ✓CA $= R166\ 700.00$ ✓R $\text{Daughter 3} = \frac{5}{12} \times R500\ 000$ $= R208\ 333,33$ ✓CA $= R208\ 300.00$ ✓R	1A for adding correct values 2MA for multiplying by the correct ratio 1CA for the answer 1CA for the answer 1R for the correct rounding 1CA for the answer 1R for the correct rounding (8)

3.1.2	✓✓A For the daughter who is 18 because she is still at school and has to further her studies at tertiary. ✓✓A OR The daughter who is 28 because she has more responsibilities than the other two daughters.	2A for naming which daughter 2O for the opinion (4) 2A for naming which daughter 2O for the opinion (4)
3.2.1	The original price of TV = R29 999.00 + R13 000.00 ✓✓SF = R42 999.00 ✓CA	1MA for adding correct amounts 1CA for the answer (3)
3.2.2	Deposit = Percentage × <i>the original price of TV</i> = 10% × R42 999.00 ✓✓SF = R4 299.00 ✓CA	2SF for the correct substitution 1CA for the answer (3)
3.2.3	Monthly Instalment = $\frac{\text{Total Amount after deposit was deducted}}{\text{number of months to pay the instalment}}$ = $\frac{\text{R42 999.00} - \text{R4 299.00}}{36 \text{ months}}$ ✓✓SF = R1 074.98 ✓CA	2SF for the correct substitution 1CA for the answer (3)
3.2.4	Benjamin must buy TV cash ✓✓A. Because he would have saved R13 000 if bought for cash ✓✓O OR Benjamin must buy TV with instalment ✓✓A. Because he cannot afford to pay R29 999.00 ✓✓O	2A for the choice 2O for the opinion (4) 2A for the choice 2O for the opinion (4)
		[23]
TOTAL MARKS: 50		