



Province of the
EASTERN CAPE
EDUCATION

**O.R TAMBO
INLAND DISTRICT**

GRADE 10

MATHEMATICAL LITERACY PAPER 1

JUNE 2022

Stanmorephysics.com

MARKS: 50

TIME: 1 HOUR

This question paper consists of 6 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL questions.
2. Number the answers correctly according to the numbering system used in this question paper.
3. You may use an approved calculator (non-programmable and nongraphical), unless stated otherwise
4. Show ALL the calculations clearly.
5. Round off ALL final answers appropriately according to the context, unless stated otherwise
6. Indicate units of measurement, where applicable
7. Diagrams are NOT necessarily drawn to scale
8. Write neatly and legibly.

QUESTION 1

The Nelson Mandela Foundation awarded R54064756 to the orphanage homes for developments.



Use the above information to answer questions that follow

Stanmorephysics.com

- 1.1.1 Rewrite R54064756 with the appropriate thousand separator spaces. (2)
- 1.1.2 Express the answer in question 1.1.1 in words (2)
- 1.1.3 The three homes X, Y and Z share the money in a ratio 3:2:1 respectively, calculate (to the nearest rand) how much each home will receive. (5)
- 1.1.4 Give a possible reason why one house receives more funds than others? (2)
- 1.2 A price of an electric toaster was R199,95 the previous year and has increased to R219,00.

Verify by means of a calculation that the percentage increase of a toaster is 9,53%.

You may use: $\% \text{ increase} = \frac{\text{New Price} - \text{Old Price}}{\text{Old Price}} \times 100$ (3)

[14]

QUESTION 2

Pule saw this recipe from the Light October 2020 Magazine and decided to cook it for his family

STICKY CHICKEN WINGS**MAKES 24 PIECES**

- 24 chicken wings
- 80ml soya sauce
- 120 ml sweet chilli sauce
- Juice of 1 lemon
- 1 tablespoon garlic crushed
- 1 tablespoon ginger grated
- 1 tablespoon cayenne pepper
- 1 tablespoon salt

NB: It takes 90 minutes to cook 24 sticky chicken wings

Use the above information to answer questions that follow.

- 2.1 Write a ratio of soya sauce to sweet chilli sauce in a simplified form. (2)
- 2.2 Pule bought a 750ml bottle of sweet chilli sauce.
- 2.2.1 How many teaspoons of sweet chilli sauce did Pule use in his recipe? (1 teaspoon = 5ml) (3)
- 2.2.2 What percentage of sweet chilli sauce is used from the whole bottle? (2)
- 2.2.3 Pule claims that it will take 4,5 hours to cook 72 sticky chicken wings. If 24 sticky chicken wings can be cooked in 90 minutes, verify by means of a calculation that his claim is correct. (3)

[10]

QUESTION 3

3.1 Below is the water tariff for the Rosehill municipality:

Category	Charge/kl
0 - 6 kl	R0.00
>6 -12kl	R8.82
>12- 20kl	R10.15
>20 - 30kl	R12.18

If a household in Rosehill Municipal area uses 25kl of water in a month, calculate the cost of water for that month.

(4)

3.2 At some clothing and food stores, it is possible to open an account, buy goods on credit and pay off what you owe the store monthly.

Bulelwa has an Edgars store account, study the account statement given and answer the questions that follow

3.2.1 How much must she pay on her account? (2)

3.2.2 When is this account due? (2)


3.2.3 Show how the balance of R452.42 was calculated. (2)

3.2.4 What is the difference between “credit available” and “credit limit”? (2)

3.2.5 The Edgars introduced a discount of 12,5% if the account is cleared before due date. Calculate how much will she pay if she decides to clear her account on the 1st of May.

(3)

[15]



MISS BN DUBE
25 HARRINGTON HOUSE
BEACH RD
PORT ELIZABETH
7450

CREDIT AVAILABLE
3307.00

Date: **07/05/12**
 Account Number: **4056747070001001001**

STATEMENT

DATE	REF NO:	DETAILS	AMOUNT	BALANCE
25/04/12		OPENING STATEMENT BALANCE		692.42
		ATM PAYMENT	240.00-	452.42
24/04/12		6 MONTHS PLAN	59.95	552.37
25/04/12		PURCHASE EDG WALMER PARK	150.00	742.37
CLOSING STATEMENT BALANCE				742.37

STATEMENT SUMMARY:
 Total Due: **240.00**
 Due Date: **01/06/12**

CREDIT LIMIT
 You now have: **4049**
 You qualify for:

0860 112 442 (South Africa, Lesotho and Swaziland)
061 225 432 (Namibia)
0800 133 268 (Botswana)

Office Hours:
 Mon-Wed: 08:00 - 18:00
 Thur: 08:00 - 19:00
 Fri: 08:00 - 21:00
 Sat: 08:00 - 18:00
 Sun & Public Hol: 09:00 - 17:00

FROM 6 MAY 2012, THE PREMIUM ON YOUR EDGARS ACCOUNT PROTECTION PLAN AND/OR ACCOUNT PARTNER PROTECTION PLAN WILL INCREASE FROM 33 CENTS PER 100.00 TO 35 CENTS PER 100.00. FOR FURTHER INFORMATION CALL 0860 112 442.

QUESTION 4

The data below shows the number of hours in a week twenty-five teenagers spent watching TV. Their times, correct to the nearest hour, were:

17	14	18	19	12	6	15	13	12	10	11	16	10
15	30	22	7	12	24	5	25	8	9	16	27	

- 4.1 Arrange the above data set in ascending order. (2)
- 4.2 Determine the mode for the above data set. (2)
- 4.3 Define the term median. (2)
- 4.4 Calculate the range for the above data set. (2)
- 4.5 The educator stated that learners spent more than 15 hours on average watching TV. Verify whether the statement is correct. (3)

[11]

GRAND TOTAL: 50



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O.R TAMBO
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GRADE 10

MATHEMATICAL LITERACY
PAPER 1
MEMORANDUM

JUNE 2022

MARKS: 50

Codes	Explanation
M	Method
MA	Method with Accuracy
CA	Consistent Accuracy
A	Accuracy
C	Conversion
D	Define
J	Justification / Reason / Explain
S	Simplification
RT / RD / RG	Reading from a table OR a graph OR a diagram OR a map OR a plan
F	Choosing the correct formula
SF	Substitution in a formula
O	Opinion
P	Penalty, for no units, incorrect rounding-off, etc.
R	Rounding-off
NP	No penalty for rounding-off OR omitting units

This Memorandum consists of 4 pages including the cover page and grid analysis.

QUESTION 1				
QN	Solution	Explanation	Marks	TL
1.1.1	R54 064 756	✓✓ A	(2)	TL1
1.1.2	Fifty-four million and sixty-four thousand seven hundred and fifty-six rand	✓✓ A	(2)	TL1
1.1.3	$3 + 2 + 1 = 6$ $X : \frac{3}{6} \times 54\,064\,756 = R27\,032\,378$ $Y : \frac{2}{6} \times 54\,064\,756 = R18\,021\,585$ $Z : \frac{1}{6} \times 54\,064\,756 = R9\,010\,793$	✓M addition ✓M multiply ✓A X amount ✓A Y amount ✓A Z amount	(5)	TL3
1.1.4	Capacity of the orphanage homes (or any other relevant answer)	✓✓ O opinion	(2)	TL2
1.2	$\% \text{ increase} = \frac{\text{New price} - \text{Old price}}{\text{Old price}} \times 100$ $= \frac{219,00 - 199,95}{199,95} \times 100$ $= 9,53\%$	✓SF substitution ✓M multiply ✓A answer	(3)	TL4
				[14]

QUESTION 2				
2.1	$80 : 120$ $2 : 3$	✓✓ RT ✓A	(3)	TL1
2.2.1	No of teaspoons = $\frac{750ml}{5ml}$ $= 150$	✓M division ✓A	(2)	TL2
2.2.2	Sweet chilli % = $\frac{120ml}{750ml} \times 100$ $= 16\%$	✓M ✓A	(2)	TL2
2.2.3	$90min \div 60 = 1,5 \text{ hours}$ $24 \text{ wings} : 1,5 \text{ hours}$ Time to cook 72 sticky chicken wings $= \frac{74}{24} \times 1,5 \text{ hours}$ $= 4$	✓M ✓MA ✓CA	(3)	TL4
				[10]

QUESTION 3				
3.1	6kl = R0,00 6kl x R8,82 = R52,92 8kl x R10,15 = R81,20 5kl x R12, 18 = R60,90 Cost of 25kl water = R52,92 + R81,20 + R60,90 = R194,02	✓MA ✓MA ✓MA ✓CA	(4)	TL3
3.2.1	R240,00	✓✓A	(2)	TL1
3.2.2	01/06/2012	✓✓RT	(2)	TL1
3.2.3	R692.42 – R240 = R452.42	✓M ✓A	(2)	TL2
3.2.4	“Credit Available” is how much credit Bulelwa has left “Credit Limit” is how much credit is allowed in total	✓O ✓O	(2)	TL2
3.2.5	Discount = $R742,37 \times \frac{12,5}{100}$ = R92,80 She paid = 742,37 – 92,80 = R649,57	✓M ✓M ✓A	(3)	TL4
				[15]
QUESTION 4				
4.1	5 6 7 8 9 10 10 11 12 12 12 13 14 15 15 16 16 17 18 19 22 24 25 27 30	✓✓A	(2)	TL1
4.2	12	✓✓A	(2)	TL1
4.3	Median is the middle value of an ordered data set	✓C ✓CA	(2)	TL1
4.4	Range = 30 – 5 = 25	✓M ✓A	(2)	TL2
4.5	Mean = $\frac{5+6+7+8+9+10+10+11+\dots +22+24+25+27+30}{25}$ = $\frac{373}{25}$ = 14,92 Not valid	✓M ✓A ✓O	(3)	TL4
				[11]
Total Marks				[50]

TAXONOMY LEVELS					
GRADE 10					
MATHEMATICAL LITERACY					
PAPER 2 : TERM 2 – 2022					
MARKS: 50					
QUESTION	KNOWLEDGE	ROUTINE PROCEDURES	COMPLEX PROCEDURES	PROBLEM SOLVING	TOTAL
DESIRED %	30%	30%	20%	20%	100%
1.1.1	2				2
1.1.2	2				2
1.1.3			5		5
1.1.4		2			2
1.2		3			3
2.1	3				3
2.2.1		2			2
2.2.2		2			2
2.2.3				3	3
3.1			4		4
3.2.1	2				2
3.2.2	2				2
3.2.3		2			2
3.2.4		2			2
3.2.5				3	3
4.1	2				2
4.2	2				2
4.3	2				2
4.4		2			2
4.5				3	3
Total	17	15	9	9	50
Actual %	34%	30%	18%	18%	100,0
Desired %	30%	30%	20%	20%	100