



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

MID-YEAR EXAMINATION

GRADE 10

MATHEMATICAL LITERACY P1

JUNE 2025

MARKS: 50

TIME: 1 HOUR

This question paper consists of 7 pages including Answer Sheet.

INSTRUCTIONS 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. Diagrams are **NOT** necessarily drawn to scale, unless stated otherwise.
9. Write neatly and legibly.

QUESTION 1

In Table 1 below list of explanations and definitions of concepts used in Mathematical Literacy.

TABLE 1: EXPLANATIONS AND DEFINITIONS OF CONCEPTS

A	Summary of transactional, debits and credits or payment and receipts made on an account.
B	Process of collecting data from a group of people.
C	A record of income and expenditure.
D	A table representing all possible outcomes of two trials taking place together
E	An estimate of income and expenditure.
F	Money taken out of a bank account.
G	A special type of diagram used to determine the outcomes of an event in a game.

Use the information above to write down the letter of the explanation or definition (A to G) of EACH of the following:

- 1.1 Survey (2)
- 1.2 Budget (2)
- 1.3 Tree diagram (2)
- 1.4 Statement (2)
- 1.5 Account (2)

[10]

QUESTION 2

2.1

Katlego is a sales representative of a certain company. She calls and text clients to secure appointments with them. Calvin, his brother advised her to check Vodacom prepaid price plans for her to render the services at ease.

Below is table 2 showing the plans and the prices of Vodacom prepaid price plans

TABLE 2: VODACOM PREPAID PRICE PLANS

Plan	Price of voice call per minute	Price per SMS	Price per international SMS
Power Pack	R1,65	R0,79	R1,74
Prepaid LTE	R2,09	R0,52	R1,74
Power bonus	R1,75	R0,62	R1,74

[Adapted from www.vodacom.co.za]

Use the information above to answer the questions that follow:

- 2.1.1 Identify the plan that is the cheapest for making calls. (2)
- 2.1.2 Calculate the cost of 6 minutes call made by Katlego, trying to convince a difficult client using Prepaid LTE plan. (3)
- 2.1.3 Katlego claims that if she sent 12 SMS to convince the same client above using the Prepaid LTE plan, she would have saved more than 50% of the amount used on voice call. Verify, showing calculations whether her claim is valid. (6)

2.2

The Maloka family realised that they are spending too much money, and they looked at their expenditure for the month of March, including items that are quoted for a year but must be paid monthly. Table 3 below indicates what they found:

TABLE 3: EXPENSES PAID BY THE MALOKA FAMILY

Bond repayments on the house	R7 000,00 p.m
Water and electricity	R2 000,00 p.m
School fees for two children	R3 000,00 p.m
Clothing accounts	R 5 00,00 p.m
Insurance on two cars	R7 200,00 p.a
Retirement policy	R3 600,00 p.a
Insurance on house and contents	R4 200,00 p.a
Church contributions	R 400,00 p.m
Bank charges	R 150,00 p.m
Entertainment and eating out	R1 000,00 p.m
Fitness club	R 500,00 p.m
Petrol	R1 500,00 p.m
Wages for domestic worker	R4 400,00 p.m
Food	R5 000,00 p.m
Cell phones for 3 family members	R 600,00 p.m
Wi-Fi	R 290,00 p.m
DSTV	R3 948,00 p.a

Study the table above and answer the questions that follow

- 2.2.1 Calculate the total expenses of the Maloka family for the month of March. (5)
- 2.2.2 Mr. and Mrs. Maloka earn R27 000 a month. Determine the amount that they overspend in the month of March. (2)
- 2.2.3 Write down the ratio of school fees for two children to the Maloka 's income in simplified form. (3)
- 2.2.4 Give with reasons two ways in which the Maloka family can reduce their expenses. (4)

[25]

QUESTION 3

The 2024 NSC results recorded an improvement in the number of distinctions in South African public schools.

TABLE 4 below shows the top 7 schools which registered many distinctions in South African public schools, NSC 2024 results.

TABLE 4: TOP 7 SCHOOLS WHICH REGISTERED MANY DISTINTIONS

Name of school	Total number of candidates	Total number of distinctions
Mbilwi Secondary School	494	754
Hoërskool Garsfontein	368	706
Hoërskool Waterkloof	371	A
Sibusisiwe Technical High School	306	734
Hoërskool Menlopark	321	755
Afrikaanse Hoër Meisieskool	239	706
Bizimali High School	440	687

[<https://businessstech.co.za>]

Hoërskool Waterkloof registered maximum number of distinctions

Use the information above to answer questions that follow.

- 3.1 Write down the mode of the total number of candidates registered. (2)
- 3.2 Calculate the total number of distinctions (**A**) registered by Hoërskool Waterkloof if the range of the total number of distinctions registered by top 7 schools is 124. (3)
- 3.3 Write down the median of the total number of distinctions registered per school. (3)
- 3.4 Calculate the mean of the total number of candidates registered. (3)
- 3.5 Draw a vertical bar graph for the total number of distinctions per school on ANSWER SHEET 1 provided. (4)

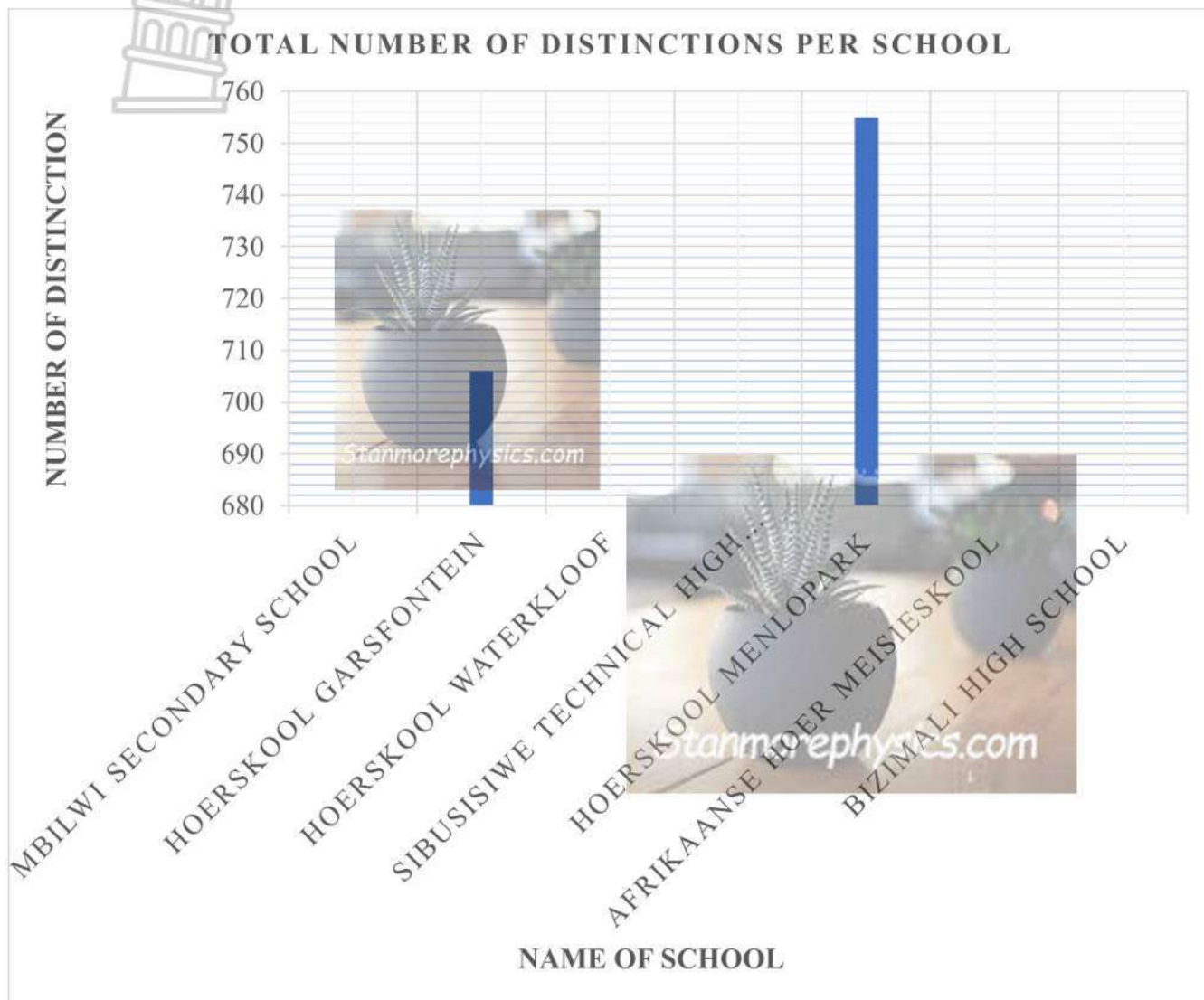
[15]

TOTAL: 50

ANSWER SHEET 1

NAME OF THE LEARNER _____

QUESTION 3.5





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MARKING GUIDELINE

MARKS : 50

Symbol/Simbool	Explanation/Verduideliking
M	Method/Metode
M/A	Method with accuracy/Metode van akkuraatheid
CA	Consistent accuracy/Volgehoue akkuraatheid
A	Accuracy/Akkuraatheid
C	Conversion/Herleiding
S	Simplification/Vereenvoudiging
RT	Reading from a table/graph/diagram/Lees vanaf tabel/grafiek/diagram
SF	Correct substitution in a formula/Korrekte vervanging in formule
O	Opinion/Example/Definition/Explanation/Opinie/Voorbeeld/Definisie/Verduideliking
P	Penalty, e.g., for no units, incorrect rounding off, etc./Penalisasie, bv. vir geen eenhede/verkeerde afronding ens.
R	Rounding off/afronding
NPR	No penalty for rounding/Geen penalisering vir afronding nie
NPU	No penalty for the units/Geen penalisering vir eenhede nie
AO	Answer only, if correct, full marks/Slegs antwoord, indien korrek, volpunte
MCA	Method with consistent accuracy/Metode met volgehoue akkuraatheid

This marking guideline consists of 8 pages.

QUESTION 1 [10 MARKS]			
Que	Solution	Explanation	T & L
1.1	B ✓✓A	2A correct letter (2)	D L1
1.2	E ✓✓A	2A correct letter (2)	F L1
1.3	G ✓✓A	2A correct letter (2)	P L1
1.4	A ✓✓A	2A correct letter (2)	F L1
1.5	C ✓✓A	2A correct letter (2)	F L1
			[10]

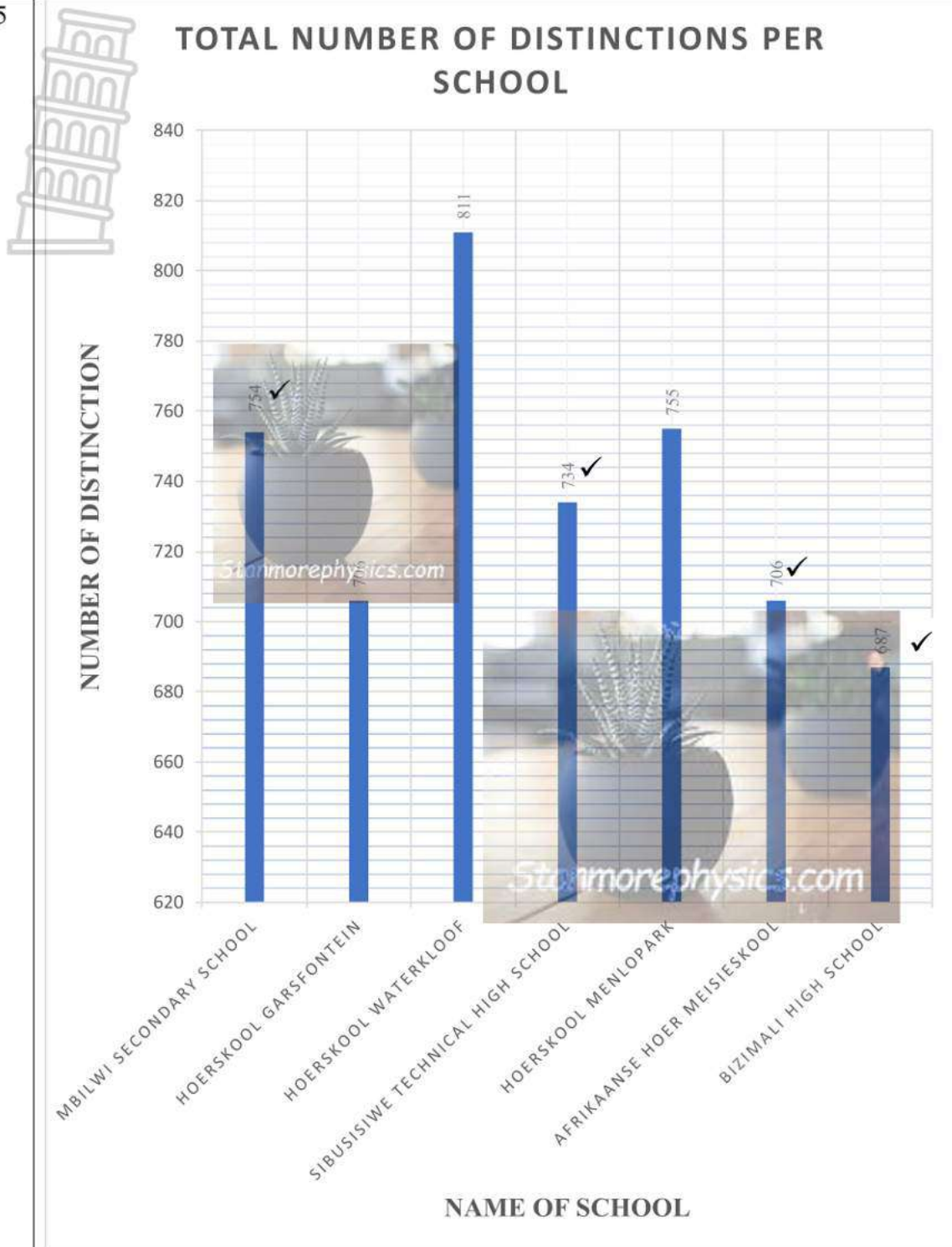
QUESTION 2 [25 MARKS]			
Que	Solution	Explanation	T & L
2.1.1	Cheapest plan for calls Power Pack ✓✓RT	2RT correct plan (2)	F L1
2.1.2	Total cost of 6 minutes call using Prepaid LTE plan \checkmark RT $= R2,09 \times 6 \checkmark$ MA $= R 12,54 \checkmark$ CA	1RT correct price 1MA multiply by 6 1CA Simplification (3)	F L2
2.1.3	Twelve SMS used \checkmark RT $= 12 \times R0,52 \checkmark$ MA $= R6,24 \checkmark$ CA Difference = $R 12,54 - R6,24 \checkmark$ MCA $= R 6,30 \checkmark$ CA $50\% \text{ of } R12,54 = R6,27$ Her claim is valid, she would have saved more than R6,27 ✓O	CA from 2.1.2 1RT R0,52 1MA multiplying R0,52 by 12 1CA Simplification 1MCA difference 1CA Simplification 1O validation (6)	F L4

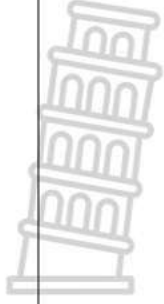
<p>2.2.1</p>	<p>Total household expenses</p> <p>Total budget per month ✓MA $= R7\ 000 + R2\ 000 + R3\ 000 + R500 + R400$ $+ R150 + R1\ 000 + R500 + R1\ 500$ $+ R4\ 400 + R5\ 000 + R600 + R290$</p> <p>$= R26\ 340$ ✓A</p> <p>Total budget per year $= R7\ 200 + R3\ 600 + R4\ 200 + R\ 3\ 948$</p> <p>$= R18\ 948$</p> <p>$= \frac{18\ 948}{12}$ ✓MA</p> <p>$= R1\ 579$ ✓CA</p> <p>Total budget per month</p> <p>$= R26\ 340 + R1\ 579$</p> <p>$= R27\ 919$ ✓CA</p>	<p>1MA adding amount of money per month</p> <p>1A simplification</p> <p>1 MA dividing by 12</p> <p>1CA simplification</p> <p>1CA simplification Answer</p> <p>(5)</p>	<p>F L3</p>
<p>2.2.2</p>	<p>Total amount overspent</p> <p>$= R27\ 919 - R27\ 000$ ✓MA</p> <p>$= R\ 919,00$ ✓CA</p>	<p>CA from 2.2.1</p> <p>1MA difference</p> <p>1CA answer</p> <p>(2)</p>	<p>F L1</p>
<p>2.2.3</p>	<p>Ratio</p> <p>3 000: 27 000 ✓ RT ✓A ✓A 1: 9</p>	<p>1RT correct values</p> <p>1A ratio in correct order</p> <p>1A ratio in simplified form</p> <p>(3)</p>	<p>F L1</p>

Que	Solution	Explanation	T & L
3.1	No Mode ✓✓ A	2A no mode (2)	D L2
3.2	Range = Max value – Min value 124 = Max value – 687 ✓ RT Max value = 124 + 687 ✓ MA = 811 ✓ CA	1RT minimum value 1MA changing the subject of the formula 1CA Simplification (3)	D L3
3.3	Median 687; 706; 706; 734; 754; 755; 811 ✓ A = 734 ✓✓ A	CA from 3.2 1A correct order 2A correct median value (3)	D L2
3.4	Mean = $\frac{494+368+371+306+321+239+440}{7}$ ✓MA = $\frac{2\,539}{7}$ ✓MA = 362,71 ✓CA	1MA adding all the values 1MA Mean concept 1CA Simplification NPR (3)	D L2

3.5

D
L2



		1A correct value for Mbilwi 1A correct value for Sibusisiwe 1A correct value for Meisies 1A correct Bizimali (4)	
		[15]	
		TOTAL : 50	

