



Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMfundo
Provinsie van die Oos Kaap: Departement van Onderwys
Porafensie Ya Kapa Botjhabela: Lefapha la Thuto

NATIONAL SENIOR CERTIFICATE

GRADE 12

JUNE 2025

MATHEMATICAL LITERACY P1 MARKING GUIDELINE

MARKS: 100

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/ graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation
P	Penalty, e.g. for no units, incorrect rounding off, etc.
R	Rounding off
NPR	No penalty for rounding minimum two decimal places
AO	Answer only
MCA	Method with constant accuracy

This marking guideline consists of 8
pages.

MARKING GUIDELINE**NOTE:**

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out an attempt of a question and not redone the question, mark the crossed out version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guideline. Stop marking at the second calculation error.
- **NOTE:** Consistent accuracy (CA) does NOT apply in cases of a breakdown.
- If the candidate presents any extra solution when reading from a graph and table then penalise for every extra item presented.
- As a general marking principle, if a candidate has incurred one mistake and there is evidence of sound Mathematics thereafter, then that candidate should lose ONE mark only.

TOPICS: F – Finance, DH – Data Handling, P – Probability

QUESTION 1 [17 MARKS]			
Ques.	Solution	Explanation	T&L
1.1.1	E ✓✓A	2 A answer (2)	DH L1
1.1.2	C ✓✓A	2 A answer (2)	P L1
1.1.3	B ✓✓A	2 A answer (2)	F L1
1.1.4	F ✓✓A	2 A answer (2)	F L1
1.2.1	✓RT 2 kg + 1,5 kg + 1,5 kg + 0,8 kg ✓ M = 5,8 kg ✓ A	1 RT correct values 1 M addition 1 A answer (3)	F L1
1.2.2	R0 ✓✓A	2A answer (2)	F L1
1.2.3	2 kg : 1,5 kg ✓RT 2 : 1,5 1 : 0,75 ✓A	1 RT correct values 1 A answer (2)	F L1
1.2.4	$\frac{R120}{4}$ ✓M = R30 ✓A	1M division 1A answer (2)	F L1
		[17]	

QUESTION 2 [18 MARKS]											
Ques.	Solution	Explanation	T&L								
2.1	$15 \times 12 \checkmark M = 185 \checkmark A$	1M multiply by 12 1A answer (2)	F L1								
2.2	$\frac{R545\,678}{12} \checkmark M = R45\,473,17 \checkmark A$ $\frac{30}{100} \times R45\,473,17 \checkmark M = R13\,641,95 \checkmark CA$	1M division by 12 1 A answer 1 M multiply by 30% 1 CA answer (4)	F L3								
2.3	$R13\,073,48 \times 20 \times 12 \checkmark M =$ $R3\,137\,635,20 \checkmark CA$ $= R3\,137\,635,20 - R1\,200\,000 \checkmark M =$ $R1\,937\,635,20 \checkmark CA$	1M multiply by 20 and 12 1 CA answer 1M subtraction 1CA answer (4)	F L3								
2.4	<p>15 years option: $R11\,910,31 \times 15 \times 12 =$ $R2\,143\,855,80 \checkmark M$</p> <p>20 years option: $R10\,906,07 \times 20 \times 12 =$</p> <table border="1"><thead><tr><th></th><th>15 years</th><th>20 years</th></tr></thead><tbody><tr><td>Advantage</td><td>Less interest $\checkmark O$</td><td>Low monthly payment $\checkmark O$</td></tr><tr><td>Disadvantage</td><td>High monthly payment $\checkmark O$</td><td>More interest $\checkmark O$</td></tr></tbody></table> <p>$R2\,617\,456,80 \checkmark M$</p> <p>Accept any other relevant reason</p>		15 years	20 years	Advantage	Less interest $\checkmark O$	Low monthly payment $\checkmark O$	Disadvantage	High monthly payment $\checkmark O$	More interest $\checkmark O$	2 M calculations 1 O advantage 15 years 1 O advantage 20 years 1 O disadvantage 15 years 1 O disadvantage 20 years <
	15 years	20 years									
Advantage	Less interest $\checkmark O$	Low monthly payment $\checkmark O$									
Disadvantage	High monthly payment $\checkmark O$	More interest $\checkmark O$									

QUESTION 3 [35 MARKS]			
Ques.	Solution	Explanation	T&L
3.1	Scatter plot ✓✓ A	2 A answer (2)	DH L1
3.2	Range = Max. – Min. Range = 33 – 22 ✓RT ✓M Range = 11 ✓A	1 RT correct values 1 M subtraction 1 A answer (3)	DH L2
3.3	80; 90; 93; 96; 98; 105; 107; 111; 116; 118; 121 ✓RT Lower Quartile = 93 ✓A; Median = 105 ✓A; Upper Quartile = 116 ✓A	1 RT arranging in ascending order 3 A answer (4)	DH L3
3.4	Box and whisker diagram ✓✓ A	2 A answer (2)	DH L1
3.5	Mean Hookers = $\frac{107+118+121+105+111+116}{6}$ ✓M $= \frac{678}{6}$ ✓M = 113 kg ✓CA Mean flyhalf = $\frac{96+98+93+80+90}{5}$ $= \frac{457}{5} = 91,4$ kg ✓CA Difference = 113 kg – 91,4 kg ✓M = 21,6 kg ✓CA ∴ not valid ✓O	1 M addition of 6 values 1 M division by 6 1 CA answer 1 CA mean flyhalf 1 M subtraction 1 CA answer 1 O opinion (7)	DH L3
3.6	23 years ✓✓ A	2 A answer (2)	DH L1
3.7	3 players will not be selected ✓✓ A	2 A answer (2)	DH L3
3.8	Position is counted ✓✓ A Height is measured ✓✓ A (Any other valid reason)	2 A answer 2 A answer (4)	DH L1
3.9	1,75; 1,80; 1,80; 1,83; 1,84; 1,85; 1,87; 1,88; 1,88; 1,89; 1,89 ✓RT Lower Quartile = 1,80 ✓CA Upper Quartile = 1,88 ✓CA IQR = $Q_3 - Q_1$ IQR = 1,88 – 1,80 ✓M IQR = 0,08 ✓A	1 RT arranged in ascending order 1 CA lower quartile 1 CA upper quartile 1 M subtraction 1 A answer (5)	DH L3

3.10	$\text{Probability} = \frac{5\sqrt{\text{RT}}}{11} \times 100 \checkmark \text{M}$ $= 45,45\% \checkmark \text{CA}$ $\approx 45\% \checkmark \text{R}$	1 RT correct value 1 M multiply by 100 1 CA answer 1 rounding R (4)	P L2
		[35]	

QUESTION 4 [30 MARKS]			
Ques.	Solution	Explanation	T&L
4.1.1	$\$2\,500 \times R17,50 \checkmark C \times 12 \checkmark M = R525\,000 \checkmark A$	1C Conversion 1 M multiply by 12 1A answer (3)	F L2
4.1.2	$AT = R121\,475 + \frac{36}{100}(R525\,000 - R512\,800) \checkmark SF$ $AT = R121\,475 + 0,36 \times R12\,200$ $AT = R121\,475 + R4\,392$ $AT = R125\,867 \checkmark S$ $AT = R125\,867 - R17\,235 \text{ [less rebate]} \checkmark M$ $AT = R108\,632$ $MT = \frac{R108\,632}{12} \checkmark M$ $MT = R9\,052,67 \checkmark A$	1 SF tax bracket 1 S simplification 1 M subtract rebate 1 M division by 12 1A answer (5)	F L3
4.2.1	$5,3\% \checkmark \checkmark A$	2 A answer (2)	F L1
4.2.2	Bar graph $\checkmark \checkmark A$	2 A answer (2)	DH L1
4.2.3	April \checkmark and May $\checkmark A$	2A answer DH (2)	DH L1
4.2.4	No $\checkmark A$ prices will increase at a lower rate $\checkmark \checkmark J$	1A answer 2 J justification (3)	F L4
4.2.5	$0,6 \times 5,9 \checkmark M = 3,54 \checkmark CA$ New Price: $R750\,000 \times \frac{103,54}{100} \checkmark$ $M = R776\,550 \checkmark CA$	1 M multiply by 60% 1 CA answer 1M multiplication 1CA answer (4)	F L2

4.3.1	$1,2 \times 1\,000\,000 = 1\,200\,000 \checkmark \checkmark A$	2 A answer (2)	F L1
4.3.2	No tax will be deducted from his winning money $\checkmark \checkmark E$	2E explanation (2)	F L4
4.3.3	<p>Balance after 1st quarter:</p> $R1\,200\,000 \times \frac{0,115}{4} = R34\,500 \checkmark M$ $R1\,200\,000 + R34\,500 = R1\,234\,500 \checkmark CA$ <p>Balance after 2nd Quarter:</p> $R1\,234\,500 \times \frac{0,115}{4} = R35\,491,875$ $R1\,234\,500 + R35\,491,875 = R1\,269\,991,875 \checkmark CA$ <p>Balance after 3rd Quarter:</p> $R1\,269\,991,875 \times \frac{0,115}{4} = R36\,512,26641$ $R1\,269\,991,875 + R36\,512,26641 = R1\,306\,504,14 \checkmark CA$ <p>Valid statement $\checkmark O$</p> <p>OR</p> $R1\,200\,000 \times 1,02875 \checkmark M \times 1,02875 \checkmark M \times 1,02875 \checkmark M$ $= R1\,306\,504,14 \checkmark A$ <p>Valid $\checkmark O$</p>	<p>1 M interest</p> <p>1 CA balance for 1st Quarter</p> <p>1 CA answer</p> <p>1 CA answer</p> <p>1 O opinion</p> <p>3 M multiplication</p> <p>1 A answer 1 O opinion (5)</p>	F L4
		[30]	
		TOTAL:	100