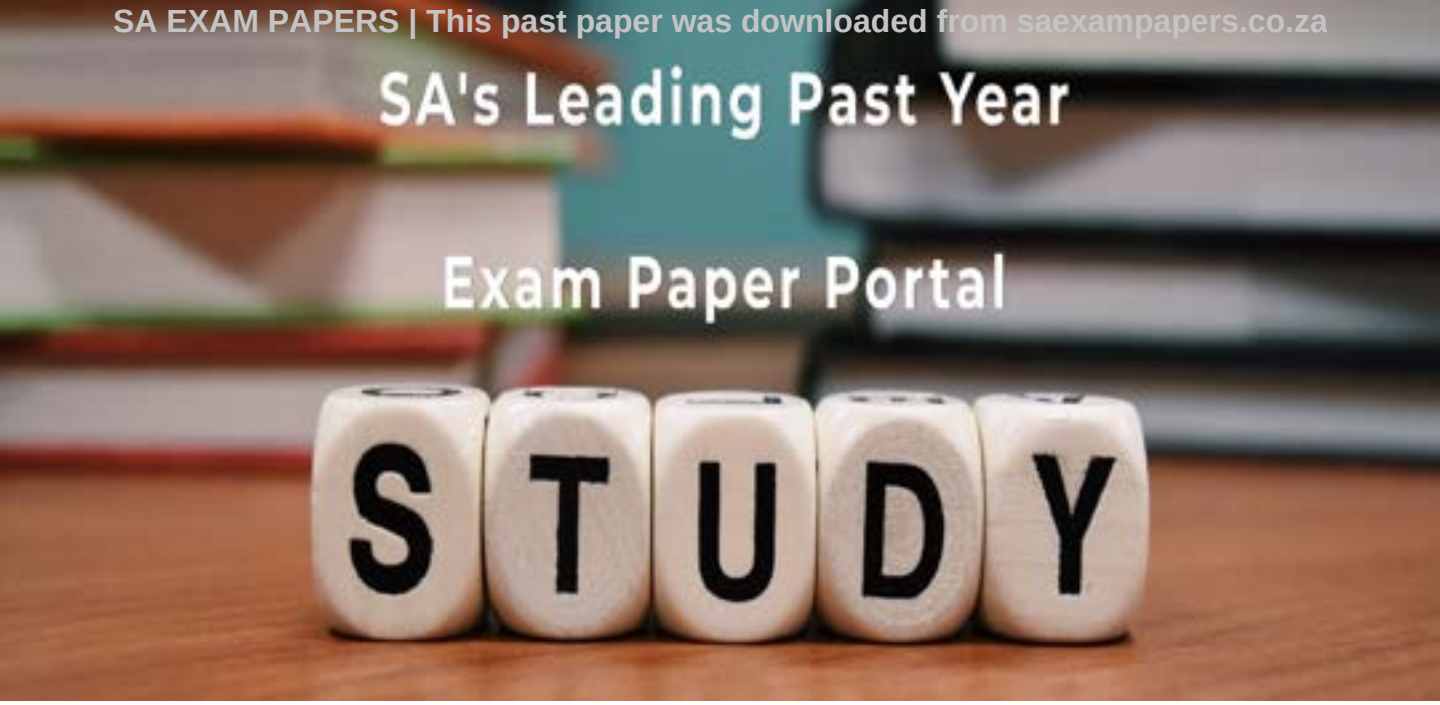

Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isebe leMfundo
Provinsie van die Oos Kaap: Department van Onderwys
Porafensie Ya Kapa Botjahabela: 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

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]	

<table>
<tr><td colspan="2">QUESTION 2 [18 MARKS]</td><td></td><td></td></tr>
<tr><td>Ques.</td><td>Solution</td><td>Explanation</td><td>T&L</td></tr>
<tr><td>2.1</td><td>15×12 ✓M $= 185$ ✓A</td><td>1M multiply by 12
1A answer (2)</td><td>F
L1</td></tr>
<tr><td>2.2</td><td>$\frac{\text{R}545\ 678}{12}$ ✓M $= \text{R}45\ 473{,}17$ ✓A

$\frac{30}{100} \times \text{R}45\ 473{,}17$ ✓M $= \text{R}13\ 641{,}95$ ✓CA</td><td>1M division by 12
1 A answer
1 M multiply by 30%

1 CA answer (4)</td><td>F
L3</td></tr>
<tr><td>2.3</td><td>$\text{R}13\ 073{,}48 \times 20 \times 12$ ✓M =
R3 137 635,20 ✓CA

$= \text{R}3\ 137\ 635{,}20 - \text{R}1\ 200\ 000$ ✓M =
R1 937 635,20✓CA</td><td>1M multiply by 20 and 12
1 CA answer

1M subtraction
1CA answer (4)</td><td>F
L3</td></tr>
<tr><td>2.4</td><td>15 years option: R11 910,31 $\times 15 \times 12 =$
R2 143 855,80 ✓M

20 years option: R10 906,07 $\times 20 \times 12 =$

<table><tr><td></td><td>15 years</td><td>20 years</td></tr><tr><td>Advantage</td><td>Less interest ✓O</td><td>Low monthly payment ✓O</td></tr><tr><td>Disadvantage</td><td>High monthly payment ✓O</td><td>More interest ✓O</td></tr></table>R2 617 456,80 ✓M

Accept any other relevant reason</td><td>2 M calculations
1 O advantage 15 years
1 O advantage 20 years
1 O disadvantage 15 years
1 O disadvantage 20 years

(6)</td><td>F
L4</td></tr>
<tr><td>2.5</td><td>Monthly payment will increase ✓✓O</td><td>2 O opinion (2)</td><td>F
L4</td></tr>
<tr><td></td><td></td><td>[18]</td><td></td></tr>
</table>

QUESTION 3 [35 MARKS]			
Ques.	**Solution**	**Explanation**	**T&L**
3.1	Scatter plot ✓✓A	2A 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 1M 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	Probability $= \frac{5\checkmark RT}{11} \times 100 \checkmark M$ $= 45{,}45\% \ \checkmark CA$ $\approx 45\% \checkmark R$	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	$\$2\,500 \times R17{,}50$ ✓C $\times 12$ ✓M $= R525\,000$ ✓A	1C Conversion 1 M multiply by 12 1A answer (3)	F L2
4.1.2	$AT = R121\,475 + \frac{36}{100}(R525\,000 - R512\,800)$ ✓SF $AT = R121\,475 + 0{,}36 \times R12\,200$ $AT = R121\,475 + R4\,392$ $AT = R125\,867$ ✓S $AT = R125\,867 - R17\,235 \quad [less\ rebate]$ ✓M $AT = R108\,632$ $MT = \frac{R108\,632}{12}$ ✓M $MT = R9\,052{,}67$ ✓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% ✓✓A	2 A answer (2)	F L1
4.2.2	Bar graph ✓✓A	2 A answer (2)	DH L1
4.2.3	April ✓ and May ✓A	2A answer DH (2)	DH L1
4.2.4	No ✓A prices will increase at a lower rate ✓✓J	1A answer 2 J justification (3)	F L4
4.2.5	$0{,}6 \times 5{,}9$ ✓M $= 3{,}54$ ✓CA New Price: $R750\,000 \times \frac{103{,}54}{100}$ ✓ M $= R776\,550$ ✓CA	1 M multiply by 60% 1 CA answer 1M multiplication 1CA answer (4)	F L2

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