education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

PROVINCIAL ASSESSMENT

GRADE 10

MATHEMATICAL LITERACY P1

JUNE 2024

MARKING GUIDELINES

MARKS: 50

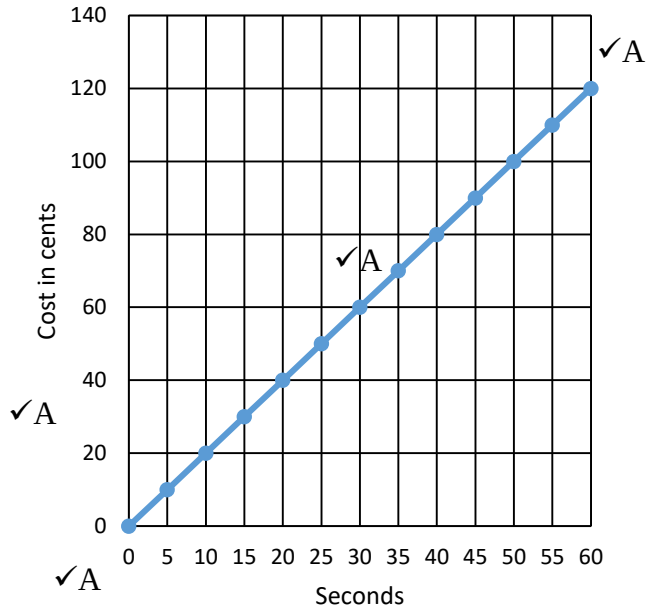
Symbol	Explanation
M	Method
MA	Method with accuracy
MCA	Method with consistent accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/a graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation/Reasoning
P	Penalty, e.g. for no units, incorrect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

These marking guidelines consists of 6 pages.

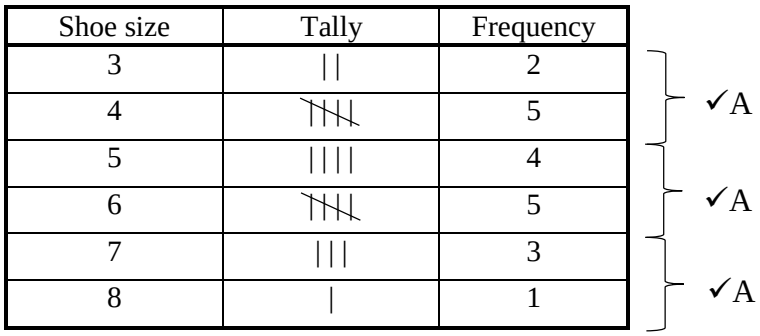
NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out (cancelled) an attempt to a question and NOT redone the solution, mark the crossed out (cancelled) version.
- Consistent accuracy (CA) applies in ALL aspects of the marking guidelines; however, it stops 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, table, layout plan and map, then penalize 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.
- Rounding is an independent mark.
- In opinion type questions marks will only be awarded if relevant calculations are shown.

QUESTION 1 [10 MARKS] Answer only AO – full marks			
Q	**Solution**	**Explanation**	**T &L**
1.1	Star General Dealer ✓✓RT	2RT reading from till slip (2)	F L1
1.2	54,00 ÷ 2 ✓M = R27,00 ✓A	1MA dividing correct values 1A correct answer **AO** (2)	F L1
1.3	$\frac{1}{2}$ ✓✓A	1A numerator 1A denominator (2)	P L1
1.4	Two hundred and sixty nine rand and eighty cents ✓✓A	2A correct words (2)	F L1
1.5	Value added tax ✓✓A	2A answer (2)	F L1
		[10]	

QUESTION 2 [16 MARKS]			
Q	**Solution**	**Explanation**	**T & L**
2.1	Cost in cents ✓✓A	2A correct answer (2)	F L1
2.2	✓MA A: 80 ÷ 2 = 40 ✓A B: 0 × 2 = 0 ✓A ✓MA C = 35 × 2 = 70 ✓A	1MA dividing correct values 1A correct answer 1A correct answer 1MA multiplying correct values 1A correct answer **AO** (5)	F L2
2.3	Cost per second for making a call  	1A labelling both axes 1A correct starting point 1A correct ending point 1A straight line (4)	F L2
2.4	Call cost = 150 × 2 ✓M = 300 cent ✓CA VAT excluded = 300 × $\frac{100}{115}$ ✓MCA = 260,87 cent ✓CA His statement is not correct ✓O	1M multiplying by 2 1CA answer 1MCA × $\frac{100}{115}$ 1CA answer 1O opinion (According to calculations and answer) (5)	F L4
		[16]	

QUESTION 3 [10 MARKS]

Q	Solution	Explanation	T & L
3.1	Discrete ✓✓A	2A answer (2)	D L1
3.2		1A correct answer per pair 1A correct answer per pair 1A correct answer per pair (3)	D L3
3.3	✓M $\frac{6+6+7+8+4+4+7+5+6+5+3+7+4+4+5+4+3+6+5+6}{20}$ ✓M $= \frac{105}{20}$ = 5,25 ≈ 5 ✓CA **OR/*OF*** ✓M $\frac{(3\times 2+(4\times 5)+(5\times 4)+(6\times 5)+(7\times 3)+8}{20}$ ✓M $= \frac{105}{20}$ = 5,25 ≈ 5 ✓CA	1M of adding values 1M dividing by 20 1CA answer NPR 1M adding values 1M dividing by 20 1CA answer NPR (3)	D L2
3.4	She used only the data of girls. ✓✓ O **OR** She used only the data of girls in her grade and not learners from other grades or ages. ✓✓ O **OR** The investigation is bias because it favours girls over boys. ✓✓ O	2O opinion (2)	D L4
		[10]	

QUESTION 4 [14 MARKS]			
Q	**Solution**	**Explanation**	**T & L**
4.1.1	Pie chart ✓✓A	2A correct answer (2)	D L1
4.1.2	New salary: 15 000 × 110% **OR** × 1,1 **OR** × $\frac{110}{100}$ ✓M = R16 500 ✓A Total income: 16 500 + 12 000 = R28 500 ✓MCA New surplus: 28 500 – 19 100 = R9 400 ✓CA **OR** 15 000 + (15 000 × 10%) ✓M = R16 500 ✓A Total income: 16 500 + 12 000 = R28 500 ✓MCA New surplus: 28 500 – 19 100 = R9 400 ✓CA **OR** Increase : 15 000 × $\frac{10}{100}$ = R1 500 ✓M New salary : 15 000 + 1 500 = R16 500 ✓A Total income: 16 500 + 12 000 = R28 500 ✓MCA New surplus: 28 500 – 19 100 = R9 400 ✓CA	1M 10% increase 1A correct answer 1MCA Adding 2 salaries 1CA answer 1M 10% increase 1A correct answer 1MCA Adding 2 salaries 1CA answer 1M 10% increase 1A correct answer 1MCA Adding 2 salaries 1CA answer (4)	F L3
4.1.3	$\frac{200}{19\,100}$ × 100 ✓MA = 10,47% ✓A Her claim is valid. ✓O	1MA of multiply correct values 1 A correct answer 1O opinion (3)	F L4

4.2.1	2 980; 3 090; 3 095; 3 115; 3 240; 3 245; 3 255 ✓M Median = 3 115 cent ✓M ∴ 3 115 ÷ 100 = R31,15 ✓CA	1M correct order 1M dividing by 100 1CA simplification (No arrangement – only conversion mark, if correctly converted) (3)	D L3
4.2.2	R31,00 ✓✓R	**CA from 4.2.1** 2R correct rounding (2)	F L1
		[14]	
		TOTAL: 50	