education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

PROVINCIAL ASSESSMENT

GRADE 10

MATHEMATICAL LITERACY P2
NOVEMBER 2024
MARKING GUIDELINES

MARKS: 75

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 consist of 5 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 [14 MARKS] Answer only AO – full marks		
Q	**Solution**	**Explanation**	**T/L**
1.1.1	C✓✓	2A answer (2)	**M** **L1**
1.1.2	D✓✓	2A answer (2)	**M** **L1**
1.1.3	B✓✓	2A answer (2)	**M** **L1**
1.1.4	A ✓✓	2A answer (2)	**M** **L1**
1.2.1	09:00✓ pm✓	1A 09:00 1A pm (2)	**M** **L1**
1.2.2	21:00 + 1 hour 45 minutes ✓= 22:45✓	1M adding 1A answer (2)	**M** **L1**
1.3	✓M 94 kg × 1 000 = 94 000 g ✓A	1M multiplying by 1 000 1A simplification (2)	**M** **L1**
		[14]	

	QUESTION 2 [21 MARKS]		
Q	**Solution**	**Explanation**	**T/L**
2.1.1	Room 05✓✓A	2A answer (2)	**MP L1**
2.1.2	✓A Kitso is staying in block B room 7.✓A	1A block B 1A room 7 (2)	**MP L1**
2.1.3	From room 4, turn left✓A Walk to the end of the passage✓ A Enter the room on the right hand side.✓ A	1A from room 4 1A to the end 1 A righthand side (3)	**MP L3**
2.1.4	Total number = (6×3) + 4✓ M = 22 people✓S ∴ 22 × 12 blocks ✓A = 264 ✓CA	1M method of addition and multiplication 1S simplification 1A multiplying by 12 1CA (4)	**MP L2**
2.1.5	A 1 unit on the layout represent 150 units in real life.✓✓	2A explanation (2)	**MP L1**
2.1.6	✓MA 3,6 m ÷150 = 0,024 m✓A Layout length = 0,024 × 1 000✓M = 24 mm✓CA **OR** ✓MA 3,6 m ÷150 = 0,024m✓A Layout length = 0,024 × 100✓M = 24 cm✓CA	1MA dividing 3,6 m by 150 1A answer 1M multiplying 1CA answer in mm 1MA dividing 3,6 m by 150 1A answer 1M multiplying 1CA answer in cm (4)	**MP L3**
2.2	P = $\frac{24}{192}$ ✓A × 100✓M = 12,5%✓CA ≈ 13✓R	1A correct fraction 1M multiplying by 100 1CA 1R correct rounding (4)	**MP L2**
		[21]	

	QUESTION 3 [21 MARKS]		
Q	**Solution**	**Explanation**	**T/L**
3.1	$1\frac{2}{3} \times 200$ ml ✓M = 333,3333333 ml✓A	1M method 1A answer (2)	**M** **L1**
3.2	No. of cups = $\frac{1\,500 \text{ ml}}{550 \text{ ml}} \times 1$ banana✓ M = 2,727272727 bananas✓ CA ≈ 3 bananas✓ R	1M dividing 1CA 1R rounding (3)	**M** **L2**
3.3	✓MA (240 ÷ 10) cm = 24 cm✓A	1MA 1A (2)	**M** **L2**
3.4	r = 8 cm ÷ 2 = 4 cm✓A V = 3,142× $(4\text{cm})^2$ ×24 cm✓ SF = 1 206,528✓CA cm^3✓A	1A radius 1 SF substitution 1CA simplification 1A unit (4)	**F** **L3**
3.5	1 000 cm^3 =1 000 ml $\frac{1\,206{,}528}{1\,000} \times 1\,000$ ml✓C = 1206,528 ml✓CA No. = 1206,528 ml÷ 550 ml✓MA = 2,193687273✓S Claim is valid✓O **OR** 550 ml × 2 ✓ = 1 100ml ✓ 1 206,528 cm^3 =1 206,528 ml ✓C ∴ 1 206,528 ml is more than 1 100 ml ✓ Twice the mixture will fit in one bottle. Claim is valid✓O	**CA from 3.1.4** 1C conversion. 1CA simplification 1MA division 1S simplification 1O opinion 1MA multiplication by 2 1CA simplification 1C conversion. 1 O opinion 1O opinion (5)	**M** **L4**
3.6	SA =3,142 × 4 cm(4 cm + 2 × 24 cm) ✓SF = 653,536 cm^3 ✓A Cost = R0,20/cm^3 × 653,536 cm^3 ✓MCA = R 130,7072 ✓CA = R130,71 ✓R	1 SF substitution 1A simplification 1MCA multiplication 1CA simplification 1R correct rounding (5)	**M** **L3**
		[21]	

	QUESTION 4 [19 MARKS]		
Q	**Solutions**	**Explanation**	**T/L**
4.1.1	Jack✓✓A	2A answer (2)	MP L1
4.1.2	Step 2: Unscrew the nut using the spanner✓A Step 3: Lift the car up with a jack ✓A Step 4 :Remove the flat tire✓A Step 5: Put on the spare wheel. ✓A	1A using the spanner 1A lift the car up 1A remove the flat tire 1A put on (4)	MP L3
4.1.3	Step 6✓✓A	2A correct step (2)	M L2
4.1.4	The car may roll over if the surface is not flat.✓✓A	2A reason (2)	M L4
4.2.1	They give indication on how to handle the box.✓✓A **OR** They show which side must face upwards.✓✓A	2A reason (2)	M L4
4.2.2	No along the length = 65 cm ÷ 20 cm ✓MA = 3,25 ≈3 ✓R No along the width = 65 cm ÷ 20 cm = 3,25 ≈3 ✓R No. along the height = 55 cm ÷ 20 cm = 2,75 ≈2 ✓R Total no. = 3 × 3 × 2 ✓MCA = 18 ✓CA Her claim is invalid. ✓	1MA dividing correct values 1R correct rounding 1R correct rounding 1R correct rounding 1MCA multiplication 1CA answer 1O (7)	M L4
		[19]	
		TOTAL: 75	