LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

GRADE/*GRAAD* 12

MATHEMATICAL LITERACY P2

JUNE EXAMINATION 2025

CORRECTED VERSION OF THE MARKING GUIDELINE

MARKS/*PUNTE*: 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
AO	Answer only
MCA	Method with consistent accuracy
RCA	Rounding consistent with accuracy

This marking guideline consists of 8 pages

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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.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.

QUESTION 1 [20 MARKS]			
Q	**Solution**	**Explanation**	**T&L**
1.1.1	I ✓✓ A	2A explanation (2)	MP L1
1.1.2	A ✓✓ A	2A explanation (2)	P L1
1.1.3	C ✓✓ A	2A explanation (2)	M L1
1.1.4	B ✓✓ A	2A explanation (2)	M L1
1.1.5	H ✓✓ A	2A explanation (2)	P L1
1.2.1	ABSA, African Bank, Capitec ✓✓ A **FNB, Old Mutual Bank**	2 A correct answer (any two banks) (2)	MP L1
1.2.2	2 ✓✓ A	2 A correct number (2)	MP L1
1.2.3	L36 ✓✓ A	2 A correct number (2)	MP L1
1.2.4	Checkers Entrance ✓✓ A	2 A correct entrance (2)	MP L1
1.3	C ✓✓ A	2 A correct formula (2)	M L1
		TOTAL : [20]	

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QUESTION 2 [29 MARKS]			
Quest	**Solution**	**Explanation**	**T & L**
2.1.1	Number of miles = $\frac{392\ km}{1{,}609\ km}$ / miles ✓ C = 243,629… = 243,6 miles ✓ CA	1 C converting to miles 1CA number of miles (2) **NPR**	MP L1
2.1.2	Measured distance= 5cm ✓ A 5 cm = 69 km ✓ M 5 cm = 69 km × **100 000** ✓ C 5 cm = **6 900 000** cm 1: **1 380 000** ✓ CA **OR** Measured distance = 50mm ✓ A 50 mm = 69 km ✓ M 50 mm = 69 km × **1 000 000** ✓ C 50 mm = 69 000 000 mm 1: **1 380 000** ✓ CA	1A measured distance 1M concept ratio 1C conversion 1CA correct answer **(Range 4,9 – 5,1)** 1A measured distance 1M concept ratio 1C conversion 1CA correct answer **(Range 49 – 51)** (4)	MP L2

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2.1.3	8,6 litres = 100 km Fuel consumption = $\frac{392\ km}{100\ km}$ × 8,6 litres ✓M = 3,92 × 8,6 litres = 33,712 litres ✓S Fuel cost = R20,34 × 33,712 litres ✓MA = R685,70208 = R 685,70 ✓CA ∴ Not correct O ✓	1M concept ratio 1S simplification 1MA multiply by the amount 1CA answer 1O Verification (5)	MP L4
2.2.1.	Hours = $\frac{45}{60}$ ✓MA = 0,75 hrs ✓C = 4 hrs + 0,75 hrs = 4,75 hrs ✓CA OR Hours = (4 × 60min + 45 min)✓C ÷ 60 min ✓MA = 4,75 hrs ✓CA	1MA dividing by 60 1C conversion 1 CA answer 1C Converting hours 1MA dividing by 60 1CA simplification (3)	MP L2
2.2.2	D = S × T 32km = 50km/h × T ✓SF T = $\frac{32km}{50km/h}$ ✓S = 0,64 hrs ✓CA = 0,64 hrs × 60 = 0 hrs 38,4 min ✓C Arrival time = **17:30** + 0 hrs 38,4 min = **18:08** ✓CA ∴ His statement is VALID, they will arrive on time ✓O	1SF substitution with correct values 1S changing subject of the formula 1CA time in hours 1C converting hours to minutes 1CA arrival time 1O Verification (6)	MP L4

2.3.1	Saturday ✓✓A	1A correct answer (2)	MP L1
2.3.2	$P = \frac{5}{7}$ ✓✓A = 0,71428 … = 0,714 ✓R	1A Numerator 1A Denominator 1R answer (3)	MP L2
		[25]	

QUESTION 3 (33 MARKS)

Q	SOLUTION	EXPLANATION	T&L
3.1.1	$A = \pi r^2$ ✓A $= 3{,}142 \times (\frac{0{,}5\ m}{2})^2$ ✓SF $= 0{,}196375\ m^2$ ✓CA	1A for radius 1SF correct substitution 1CA correct answer (3)	M L2
3.1.2	Area of the Garden = L × b = 10 m × 4 m ✓SF = 40 m^2 ✓A Area of circular stones = 0,196375 m^2 × 5 = 0,981875 m^2 ✓CA Area of the pond = s^2 = $(2)^2$ ✓SF = 4 m^2 ✓CA Area of grass = 40 m^2 – (0,981875 m^2 + 4 m^2) ✓MCA = 35,018125 m^2 ✓CA = 36 m^2 ✓R	**CA from 3.1.1** 1SF correct substitution 1A simplification 1CA simplification 1SF correct substitution 1CA simplification 1MCA subtraction 1CA total area of grass 1R rounding (8)	M L3
3.1.3	Cost of grass = 36 m^2 × R45 ✓MCA = R1620 ✓CA	**CA From 3.1.2** MCA multiply by 45 1CA simplification (2)	M L1

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3.2.1	Volume = S × S × H ✓C = 2 m × 2 m × 1,3 m ✓SF = 5,2 m^3 ✓CA	1C conversion to m 1SF correct substitution 1CA volume (3) **NPR**	M L3
3.2.2	Volume of tank = 5,2 × 1000 ℓ ✓C = 5200 ℓ ✓CA Water required = 5200 ℓ × 90% ✓M = 4680 ℓ ✓CA	**CA from 3.2.1** 1C converting to litres 1CA volume of tank 1M multiplying by 90% 1CA simplification (4)	M L3
3.2.3	Maximum number of fish = 4680 ℓ ÷ 200 ℓ ✓M = 23,4 × 2 ✓M = 46,8 ✓CA = 46 fish ✓R	**CA from 3.2.3** 1M dividing by 200 1M multiplying by 2 1CA number of fish 1R rounding up (4)	M L2
3.2.4	TSA = (L × B) + 2 (L×H) + 2 (B×H) = (2m × 2m) + 2(2m ×1,3m) +2 (2m ×1,3m) ✓SF = 14,4 m^2 ✓CA = 14,4 m^2 × 2 ✓MCA = 28,8 m^2 ✓CA = 28,8 m^2 ÷ 3 ✓MCA = 9,6 ℓ ✓CA	1SF correct substitution 1 CA surface area 1 MCA multiplying by 2 1 CA doubled area 1M dividing by 3 1CA answer (6)	M L3
3.2.5	°C = (°F – 32) ÷ 1,8 ✓ RT = (74°F – 32) ÷ 1,8 ✓SF = 23,3 °C ✓CA	1RT value 74 1SF substitution 1CA simplification (3) **NPR**	M L2
		[33]	

QUESTION 4 [22 MARKS]			
Q	**Solution**	**Explanation**	**T /L**
4.1.1	Gallons to litres = $\frac{42}{0{,}064172}$ ✓A = 654,4910…✓S = 654 ℓ ✓R	1A using ratio 1S simplification 1R rounding (3)	M L2
4.1.2	No of barrels = $\frac{34\,000}{654}$ ✓RT = 51,98776758 = 51 barrels ✓CA ∴Not correct ✓O OR 1 barrel = 42 US gallons Tank capacity = 34 000 litres 1 litre = 0,064172 gallons 1 gallon = 15,583120364 litres Number of gallons = $\frac{34\,000\ l}{15{,}583120364\ l}$ = 2 181,848 Number of barrels = $\frac{2\,181{,}848}{42}$ = 51,94876…. = 51	**CA from 4.1.1** 1RT for 34 000 1CA no of barrels 1O for verification **AO** (3)	M L4
4.1.3	R = 2 ÷ 2 = 1 ✓A TSA ✓SF ✓SF = (2 × 3,142×$(1m)^2$) + (2 × 3,142 × 1m × 12,8 m) = 6,284 m^2 + 80,4352 m^2 ✓M = 86,7192 m^2 ✓CA	1A radius 2SF substitution 1M addition of areas 1CA simplification (5)	M L3

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4.2.1	Double door: single doors 2: 5 ✓RT ✓A	1 RT correct values 1 A correct order (2)	MP L1
4.2.2	South East / SE ✓✓ A	2 A correct direction (2)	MP L2
4.2.3	✓ A False, an en-suite is when a bathroom and a bedroom are connected and the bathroom can only be accessed through the bedroom and no other space. The bathrooms are not connected to the bedrooms. ✓✓ O	1 A for false 2 O justification (3)	MP L4
4.2.4	**Rectangle** ✓✓A	2 A correct shape (2)	M L1

	DO NOT MARK	**DO NOT MARK**	
	THIS QUESTION SHOULD BE MARKED OUT OF 20 MARKS, THEN SCALED UP TO 22 MARKS.		
		[22]	
		TOTAL :100	

ADDITIONAL NOTES

	QUESTION 1		
1.1.1 TO 1.1.5	If a learner has written the full correct statement, in state of a letter.	FULL MARKS	
1.2.3	36 only	ONE MARK	
1.2.3	L35	NO MARK	
1.3	If a learner has written the full correct formula, in state of a letter.	FULL MARKS	
	QUESTION 2		
2.3.1	Today OR 15 February 2025	NO MARK	

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