GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

JUNE EXAMINATION
GRADE 12

2026

MARKING GUIDELINES

MATHEMATICAL LITERACY

(PAPER 2)

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/graph/document/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation
P	Penalty e.g. for no unit, incorrect rounding-off, etc.
NPR	No penalty for correct rounding
NPU	No penalty for omitting a unit, but wrong unit is penalised
AO	Answer only

KEY TO SUBJECT SYMBOLS:

M = Measurement; MP = Maps, Plan and other representations; P = Probability

KEY TO LEVEL OF DIFFICULTY:

E = EASY; M = MEDIUM; D = DIFFICULT

9 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 or break-down.
- If the candidate presents any extra solution when reading from a graph, table, layout plan and map, then penalise for every extra item presented.
- Rounding is an independent mark.
- General principle of marking, if the candidate makes one mistake one mark is deducted.
- A conclusion mark can only be awarded if relevant calculations of at least $\frac{1}{3}$ of the maximum mark of the sub-question has been awarded.
- No penalty for rounding (NPR) if the first decimal is correct, except questions involving money.

NOTES

1.3.3	Accept Botswana
2.3	221-279 = 58Km (recovered)
3.1.2	If early rounding (Penalise 1 mark) 77 m x 10.97 m = 260.76 m^2
3.3	If learners subtracted from the diameter: 6,2cm – 1cm = 5,5cm 3,142 x 5,2= 16,3384 cm **Give 3/5 marks**
4.6	**English version, Accept root of 144 = 12 cm** $A = breadth \times width$ 144 m^2 = breadth × breadth ✓ SF 144 m^2 = $breadth^2$ ✓ M breadth = 12 m ✓CA **If the learner measures breadth from the question paper and use scale:** Accept: 7mm – 8mm✓ 7,5 mm × 400 ÷ 1 000✓ = 3 m ✓
5.3.1	40 cm – 37,5 cm = 2,5 cm✓ ∴ Height = 40 cm – 2.5 cm✓ = 37,5 cm **Or Reverse method** 37,5cm ÷ 3 ✓= 12,5 cm ✓

QUESTION 1		(20 MARKS)	AO
Q	**Solution**	**Explanation**	**T&L**
1.1.1	C ✓✓ A	2A correct answer (2)	M L1 E
1.1.2	D ✓✓ A	2A correct answer (2)	M L1 M
1.1.3	B ✓✓ A	2A correct answer (2)	MP L1 M
1.2.1	$1\ kg\ \times 1\ 000$ ✓C $= 1\ 000\ g$ ✓A	1C conversion 1A simplification (2)	M L1 E
1.2.2	$20\ \div 60$ ✓MA $= 0{,}33\ hours$ ✓A	1MA dividing by 60 1A simplification **NPR** **NPU** (2)	M L1 E
1.2.3	$\frac{36}{24} \times 4$ ✓ MA $= 6\ eggs$ ✓A **OR** $\frac{24}{12} \times 3$ ✓ MA $= 6$ eggs ✓A **OR** 24 muffins $= 4$ eggs 12 muffins $= 2$ eggs Total eggs $= 4 + 2$ ✓ MA $= 6$ eggs ✓A	1MA quantity needed 1A simplification 1MA quantity needed 1A simplification 1MA adding 4 and 2 1A simplification (2)	M L1 M
1.3.1	Bar Scale /Line Scale✓✓ A	2 A answer (2)	L1 MP E
1.3.2	Indian Ocean ✓✓ A	2 A answer (2)	L1 MP E
*1.3.3	Namibia ✓✓ A	2 A answer (2)	L1 MP E
1.3.4	Harrismith ✓✓ RT	2 RT answer (2)	MP L1 E
		[20]	

QUESTION 2			(19 MARKS)
Q	**Solution**	**Explanation**	**T&L**
2.1	Strip chart/Strip map ✓✓ A	2 A answer (2)	MP L1 E
2.2	$A1$ ✓ RT $A2$ ✓ RT $A3$ ✓ RT	1 RT A1 1 RT A2 1 RT A3 (3)	MP L1 E
*2.3	279 −221 ✓RT ✓MA = 58 km ✓A **OR** 1 165 − 1 107 ✓RT ✓MA = 58 km ✓A	1 RT 279 km and 221 km 1 MA subtraction 1 A simplification 1 RT both values 1 MA subtraction 1 A simplification **AO** (3)	MP L2 M
2.4	Distance : Gaborone to Pretoria = 324 km ✓ A Speed = 120 km/hr $time = distance \div speed$ = $\frac{324}{120}$ ✓SF = 2,7 *hours* ✓CA Arrival time = 18:20 + 2,7 hours ✓ MCA = 21: 02 She will arrive at 21:02 ✓ CA	1 A correct distance 1SF substitution 1 CA simplification 1MCA adding the times 1 CA arrival time **Accept: 09:02 pm** (5)	MP L3 M
2.5	Three million, one hundred and thirty six thousand, eight hundred and forty four. ✓✓ *A*	2 A answer (2)	MP L1 E
2.6	• From Gaborone, drive to Lobatse for 45 km. ✓A • When you reach Lobatse, turn left. ✓A • Drive towards the N4; pass Zeerust. ✓A • Turn left at Rustenburg, drive for 41 km and the next destination is Sun City.✓A	1 A Lobatse 1 A Turn left 1 A N4/Zeerust 1 A Rustenburg/41km (4)	MP L2 M
		[19]	

QUESTION 3			(24 MARKS)
Q	**Solution**	**Explanation**	**T&L**
3.1.1	P (artificial court) $= \frac{1}{4}$ ✓A ✓A	1A numerator 1A denominator (2)	**P** **L2** **E**
*3.1.2	Length : $78ft \div 0{,}0328084$ $= 2377{,}439924$ cm ✓C $= 2377{,}439924$ cm $\div 100$ $= 23{,}77439929$ m ✓A Width : 36 ft $\div 0{,}0328084$ $= 1097{,}279965 \div 100$ $= 10{,}97279965$ m ✓A $Area = 23{,}77439929$ m $\times 10{,}97279965$ m ✓SF $= 260{,}87$ m^2 ✓CA $\therefore Correct\ claim$ ✓O **OR** 1 cm = 0,0328084' (ft) 36' ÷ 0,0328084' = 1 097,3 cm ✓ A 78 ÷ 0,0328084' = 2 377,4 cm ✓ A 1 097,3 cm × 2 377,4 cm ✓SF = $\frac{2\ 608\ 721{,}02\ \text{cm}^2}{10\ 000}$ ✓CA = 260, 87 m^2 ✓C The claim is valid ✓O	1C conversion 1A simplification 1A simplification 1SF substitution into the formula 1CA simplification 1O conclusion 1A simplification 1A simplification 1SF substitution into the formula 1CA simplification 1C conversion 1O conclusion (6)	M L4 D

3.1.3	11 : 08 + 2 hours 53 minutes ✓A Ended at = 14 : 01 ✓ A	1A adding time 1A answer in 24-hour format **AO** (2)	M L2 M
3.2.1	Body Mass Index ✓ ✓ A	2A Answer (2)	M L1 E
3.2.2	Weight on 90th percentile curve: 85 kg ✓RT Height on 75th percentile curve: 181 cm ✓RT = 1,81 m ✓ C BMI = $\frac{\text{Weight in kg}}{(\text{Height in m})^2}$ BMI = $\frac{85\ \text{Kg}}{(1{,}81\ \text{m})^2}$ ✓ SF $\frac{85\ \text{kg}}{3{,}2761\ \text{m}^2}$ = 25,9 kg/m^2 ✓ CA Status is overweight ✓ O Carlos cannot play because he is overweight ✓J	1RT weight 1RT height 1C height in m **(Accept Height = 182 cm)** 1SF substitution into the formula 1CA simplification 1O status 1J justification (7)	M L4 D
*3.3	C = 3,142 × 62 mm ✓ SF = 194,804 mm ✓CA = 194,804 mm ÷ 10 = 19,48 cm ✓C ∴ 19,48 cm – 1 cm✓MCA = 18,48 cm ✓CA **OR** C = 2 × 3,142 × 31 ✓SF = 194,804 mm ✓ CA 1 cm = 10 mm ✓C ∴ 194,804 mm – 10 mm ✓ MCA = 184,804 mm ✓ CA **OR**	1SF substitution 1CA simplification 1C conversion 1MCA subtracting opening 1CA simplification 1SF substitution 1CA simplification 1C conversion 1MCA subtracting opening 1CA simplification	M L3 M

	$62mm \div 10 = 6{,}2cm$✓C C = 3,142 × 6,2 cm ✓ SF = 19,4804 cm ✓CA ∴ 19,48 cm – 1 cm✓MCA = 18,48 cm ✓CA	1C conversion 1SF substituting in the formula 1CA simplification 1MCA subtracting opening 1CA simplification (5)	
		[24]	

QUESTION 4			(19 MARKS)
Q	**Solution**	**Explanation**	**T&L**
4.1	A seating plan is a diagram that indicates where people should sit in the Royal Spa Centre auditorium. ✓✓ D **OR** A seating arrangement that indicates where people should sit in the Royal Spa Centre auditorium. ✓✓ D	2 D definition (2)	MP L1 M
4.2	Tiered = 192 ✓ *RT* Stalls = 179 ✓ *RT* 179 : 192 ✓ CA **Accept:** 176 ✓RT : 192 ✓ *RT* 11 : 12 ✓ CA	1 RT stalls 1 RT tiered seating 1 CA correct ratio format 1 RT stalls 1 RT tiered seating 1 CA correct ratio format **AO** (3)	MP L2 M
4.3	To accommodate wheelchair users. ✓✓ O	2 O reason (2)	MP L4 E
4.4	$\frac{25\checkmark A}{767\checkmark A} \times 100 = 3{,}259\%$ ✓ CA **Accept:** $\frac{24\checkmark A}{764\checkmark A}$ $= 0{,}03141361257 \times 100$ $= 3{,}14136\%$ ✓ CA	1A numerator 1A denominator 1CA simplification **NPR** 1A numerator 1A denominator 1CA simplification **NPR** (3)	P L2 E

4.5	**Measured distance on the map = 8,2 cm** ✓M 8,2 cm × 400 ✓MCA = 3 280 cm ✓ $CA \div 100$ = 32,8 m ✓ C **OR** **Measured distance on the map = 82 mm** ✓M 82 mm × 400 ✓MCA = 32 800 mm ✓ $CA \div 1\,000$ = 32,8 m ✓ C	1 M measuring 1MCA multiplying by scale factor 1CA answer 1C conversion 1 M measuring 1MCA multiplying by scale factor 1CA answer 1C conversion **Accept: 8,1cm – 8,3cm / 81mm-83mm** (4)	MP L3 M
*4.6	$A = length \times width$ 144 m^2 = 32,8 m × width ✓ SF $Width$ = 144 m^2 ÷ 32,8 m✓ M Width = 4,39 m ✓CA	**CA from QUESTION 4.5** 1SF correct substitution 1 M subject of the formula 1 CA answer (3)	M L2 M
4.7	Row U ✓A, it is farthest from the stage, and it has a restricted view. ✓ J	1 A correct row 1 J reasoning **Accept Row: R, S, T or Q** (2)	MP L4 E
		[19]	

QUESTION 5			(18 MARKS)
Q	**Solution**	**Explanation**	**T&L**
5.1.1	$°C = (°F - 32) \div 1,8$ $-1 = \frac{°F - 32}{1,8}$ ✓ SF $-1 \times 1,8 = °F - 32$ $°F = 32 - 1,8$ ✓ MA $°F = 30,2°F$ ✓ A **OR** $°F = (°C \times 1,8) + 32$✓ MA $°F = (-1 \times 1,8) + 32$✓ SF $°F = 30,2°F$ ✓ A	1SF correct substitution 1MA changing subject of the formula 1A simplification **NPR** 1MA changing subject of the formula 1SF correct substitution 1A simplification **NPR** (3)	M L2 M
5.1.2	$\frac{260,286 \text{ km}}{3,337 \text{ km}}$ ✓MA = 78 laps ✓ A	1MA dividing values 1A answer (2)	MP L2 E
5.2	Radius $= \frac{90 \text{ cm}}{2 \text{ ✓MA}} = 45 \text{ cm}$ ✓ M Height $= 1,4 \text{ m} \times 100$ $= 140 \text{ cm}$ ✓ C Volume$= 3,142 \times 45 \text{ cm} \times 45 \text{ cm} \times 140 \text{ cm}$ ✓SF $= 890\,757 \text{ cm}^3$✓CA $\div 1\,000$ $= 890,757 \text{ litres}$	1MA divide by 2 1M radius 1C conversion 1SF substitution into the formula 1CA simplification **NPR** (5)	M L3 D

*5.3.1	12,5 cm ✓RT × 3 ✓MA = 37,5 cm **OR** 12,5 cm + 12,5 cm + 12,5 cm ✓RT ✓ MA = 37,5 cm	1RT value of 12,5 cm 1MA multiplying by 3 shelves 1RT value of 12,5 cm 1MA adding 12,5 cm three times (2)	M L2 E

5.3.2	$SA = 2(30\text{ cm} \times 15\text{ cm}) + 2(30\text{ cm} \times 40\text{ cm}) + 2(15\text{ cm} \times 40\text{ cm})$ ✓SF $= 900\text{ cm}^2 + 2\,400\text{ cm}^2 + 1\,200\text{ cm}^2$ ✓M $= 4\,500\text{ cm}^2$ ✓ CA ✓ U	1SF correct substitution into the formula 1M adding the areas 1CA simplification 1U correct unit (4)	M L2 M
5.3.3	$\frac{4\,500\text{ cm}^2 \times \text{R}12{,}25}{100\text{ cm}^2}$ ✓MCA $= \text{R}551{,}25$ ✓CA	**CA from QUESTION 5.3.2** 1MCA calculating costs 1CA answer (2)	M TL2 M
		[18]	

TOTAL: 100