

FINAL



KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

**PROVINCIAL STANDARDISED
ASSESSMENT**

GRADE 12

MATHEMATICAL LITERACY P2

PREPARATORY EXAMINATION

SEPTEMBER 2026

MARKING GUIDELINES

MARKS: 150

SYMBOL	EXPLANATION
MA	Method with accuracy
MCA	Method with consistent accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT	Reading from a table/graph/diagram/map/document
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example/explanation
R	Rounding off
P	Penalty, e.g., for no units, incorrect rounding off, etc.
AO	Answer only
NPU	No Penalty for omitting units
NPR	No penalty for rounding
RCA	Rounding consistent with accuracy

This marking guideline consists of 19 pages, including an analysis grid of cognitive levels.

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 penalise for every extra item presented.
- As a general marking principal, 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.
- A conclusion mark can only be given if relevant calculations precede it. At least a $\frac{1}{3}$ of the mark before the conclusion.
- No penalty for rounding (NPR) if the first decimal is correct, except for questions involving money.

Ques	Solution	Explanation	T&L
1.2.4	✓A ✓A Twenty-two minutes past five in the afternoon. OR ✓A ✓A Twenty-two minutes past five post meridiem. OR ✓A ✓A Seventeen hundred hours and twenty-two minutes. OR ✓A ✓A Twenty-two minutes past seventeen hundred hours. OR ✓A ✓A Five twenty-two pm	2A time in words (2)	M L1 E
1.2.5	✓C Number of Minutes = $(3 \times 60\text{min}) + 45\text{min}$ ✓MA = 225 minutes ✓A	1C multiply by 60min 1MA adding 45 min 1A simplification in minutes (3)	M L1 E
1.3.1	Total number of parts = $1 + 1 + 4 + (7 \times 4)$ ✓MA = 34 parts ✓A	1MA adding assembly components 1A simplification (2)	MP L1 E
1.3.2	Anti-clockwise ✓✓A	2A correct direction (2)	MP L1 E
1.3.3	Part g ✓✓RT OR Allen Key ✓✓RT	2RT correct part (2)	MP L1 E
1.3.4	Chair back ✓✓RT	2RT correct component (2)	MP L1 E
		[30]	

QUESTION 2 [29 MARKS]			
Ques	Solution	Explanation	T&L
2.1.1	South East ✓✓A OR SE ✓✓A	2A correct compass direction (2)	MP L1 E
2.1.2	✓RT N1 and R300 ✓RT	1RT for N1 1RT for R300 (2)	MP L1 E
2.1.3	- From CT Int. Airport at the intersection of Modderdam Road and Stellenbosch Arterial turn right into Stellenbosch Arterial. ✓A - Take the first left into Erica Drive ✓A - Continue on Erica Drive pass Chestnut Way and after Erica Drive turns to the right and turn left into Kern Crescent ✓A - Turn right into Proton Road Belhar ✓A	1A turn right into Stellenbosch Arterial 1A first left into Erica Drive 1A turn right into Kern Crescent 1A turn right into Proton Road (4)	MP L4 M
2.1.4	Broken line ✓✓RT OR Dotted line ✓✓RT OR Dashed line ✓✓RT	2RT description (2)	MP L1 E
2.2.1	Time in hours = $6 \div 60$ ✓MA = 0,1 Time = 36,1 hours ✓A Distance = $9,86\text{km/h} \times 36,1\text{h}$ ✓SF = 355,946 km ✓CA	1MA divide by 60 1A time in hours 1SF correct substitution 1CA simplification NPR (4)	MP L2 M
2.2.2	$P(\text{Spectators at WP}) = \frac{3}{11} \times 100\%$ $= 27,27\% \text{ ✓CA}$	1A numerator 3 1A denominator 11 1CA simplification NPR (3)	P L2 M

Ques	Solution	Explanation	T&L
2.2.3	Safety and Tracking ✓✓O OR Validation of Route Completion ✓✓O OR Performance Monitoring ✓✓O OR Logistics, such as time cut-offs and Support ✓✓O	(2)	MP L1 M
2.3.1	6 doors ✓✓RT OR Six doors ✓✓RT	(2)	MP L1 M
2.3.2	South Elevation ✓✓RT	(2)	MP L1 E
2.3.3	Staircase ✓✓RT	(2)	MP L1 E
2.3.4	Length = 6,5cm ✓A ✓MCA Actual length = $(6,5\text{cm} \times 158) \div 100$ ✓C = 10,27m ✓CA OR Length = 65mm ✓A ✓MCA Actual length = $(65\text{mm} \times 158) \div 1000$ ✓C = 10,27m ✓CA	1A measuring length in cm 1MCA multiply by 158 1C divide by 100 1CA simplification in m OR 1A measuring length in mm 1MCA multiply by 158 1C divide by 1 000 1CA simplification in m ACCEPT LEEWAY OF 1mm (4)	MP L3 M
		[29]	

QUESTION 3 [29 MARKS]			
Ques	Solution	Explanation	T&L
3.1.1	Radius in metres = $810 \div 1\,000$ ✓C $= 0,81\text{ m}$ ✓A Diameter = $0,81\text{m} \times 2$ ✓MCA $= 1,62\text{m}$ Circumference = $3,142 \times 1,62\text{m}$ ✓SF $\approx 5,09004\text{ m}$ ✓CA OR Diameter = $810\text{mm} \times 2$ ✓MA $= 1\,620\text{mm}$ ✓A Circumference = $3,142 \times 1\,620\text{mm}$ ✓SF $= 5\,090,04\text{mm} \div 1\,000$ ✓C $\approx 5,09004\text{ m}$ ✓CA	1C divide by 1 000 1A simplification 1MCA multiply by 2 1SF correct substitution 1CA simplification OR 1MA multiply by 2 1A simplification 1SF correct substitution 1C divide by 1 000 1CA simplification NPR (5)	M L2 M
3.1.2	Number of rotations = $12 \div 5,09004$ ✓MCA $= 2,36$ ✓CA ≈ 2 ✓R	CA from 3.1.1 1MCA divide by 5,09004 1CA simplification 1R correct rounding (3)	M L2 M
3.1.3	Area = $3,142 \times (810\text{mm})^2$ ✓SF $= 2\,061\,466,2\text{mm}^2$ ✓CA $= 2\,061\,466,2\text{mm}^2 \div 1\,000^2$ ✓C $\approx 2,0615\text{m}^2$ The statement is VALID. ✓O OR ✓C Area = $3,142 \times (810\text{mm} \div 1\,000)^2$ ✓SF $= 2,0614662\text{m}^2$ ✓CA $\approx 2,0615\text{m}^2$ The statement is VALID. ✓O	1SF correct substitution 1CA simplification 1C divide by $1\,000^2$ 1O conclusion OR 1C divide by 1 000 1SF correct substitution 1CA simplification 1O conclusion (4)	M L4 M

Ques	Solution	Explanation	T&L
3.2.1	$\text{Area} = 1,89 \text{ m} \times 1 \text{ m} \checkmark \text{SF}$ $\checkmark \text{A}$ $= 1,89 \text{ m}^2 \checkmark \text{A}$	1SF correct substitution 1A simplification 1A for unit m^2 (3)	M L2 E
3.2.2	$\text{Convert to metres} = 200 \text{ mm} \div 1\,000 \checkmark \text{C}$ $= 0,2 \text{ m}$ $\checkmark \text{MA}$ $\text{Length} = 10 \text{ m} - (0,2 \text{ m} + 0,2 \text{ m}) = 9,6 \text{ m} \checkmark \text{A}$ $\text{Width} = 4 \text{ m} - (0,2 \text{ m} + 0,2 \text{ m}) = 3,6 \text{ m} \checkmark \text{A}$ $\checkmark \text{MCA}$ $\text{Number of panels (Length)} = \frac{9,6 \text{ m}}{1,89 \text{ m}} = 5,079 \approx 5 \checkmark \text{R}$ $\text{Number of panels (Width)} = \frac{3,6 \text{ m}}{1 \text{ m}} = 3,6 \approx 3 \checkmark \text{R}$ $\checkmark \text{MCA}$ $\text{Total number of panels} = 5 \times 3 = 15 \checkmark \text{CA}$	1C divide by 1 000 1MA adding 0,2 + 0,2m then subtracting from 10m 1A simplification 1A simplification 1MCA dividing 9,6m by 1,89m 1R correct rounding 1R correct rounding 1MCA multiplying 5 by 3 1CA simplification (9)	M L3 M
3.2.3	$\checkmark \text{MCA}$ $\text{Total weight in tons} = (20 \times 15) \div 1\,000 \checkmark \text{C}$ $= 0,3 \text{ tons} \checkmark \text{CA}$	CA from 3.2.2 1MCA multiply by 15 1C divide by 1 000 1CA simplification (3)	M L2 M
3.2.4	Due to rising electricity costs, solar is a way to reduce monthly electricity bills. $\checkmark \checkmark \text{O}$ OR Solar panels combined with battery storage can provide electricity when the grid is unavailable. $\checkmark \checkmark \text{O}$ OR The country has excellent solar resources, making solar systems well suited to many parts of the country. $\checkmark \checkmark \text{O}$ OR Solar technology has become more affordable in SA. $\checkmark \checkmark \text{O}$ OR Households and businesses can generate some of their own electricity instead of relying entirely on Eskom or municipal electricity. $\checkmark \checkmark \text{O}$ OR Solar power has environmental benefits. There is no burning coal and fossil fuels, helping to reduce greenhouse-gas emissions and decreasing the global carbon footprint. $\checkmark \checkmark \text{O}$	2O correct explanation (2)	M L4 M
		[29]	

QUESTION 4 [32 MARKS]			
Ques	Solution	Explanation	T&L
4.1.1	$\begin{aligned} \text{Height (m)} &= (10 \times 0,3048\text{m}) + (6 \times 2,54\text{cm} \div 100) \\ &= 3,048 \text{ m} + 0,1524 \text{ m} \checkmark \text{MA} \\ &= 3,2004\text{m} \checkmark \text{CA} \end{aligned}$ OR $\begin{aligned} \text{Height (m)} &= (10 \times 0,3048\text{m} \times 100) + (6 \times 2,54\text{cm}) \checkmark \text{MA} \\ &= 304,8 \text{ cm} + 15,24 \text{ cm} \checkmark \text{MA} \\ &= 320,04\text{cm} \div 100 \checkmark \text{C} \\ &= 3,2004\text{m} \checkmark \text{CA} \end{aligned}$	1MA multiply by 10 ft 1MA multiply by 6in 1C divide by 100 1MA adding 1CA simplification OR 1MA multiply by 10 ft 1MA multiply by 6inches 1MA adding 1C divide by 100 1CA simplification (5)	M L2 M
4.1.2	Convert to $\text{cm}^3 = 15\,000\ell \times 1\,000 \checkmark \text{C}$ $= 15\,000\,000 \text{ cm}^3 \checkmark \text{A}$ Height of tank $= 3,2004\text{m} \times 100 \checkmark \text{C}$ $= 320,04 \text{ cm}$ $15\,000\,000 \text{ cm}^3 = 3,142 \times r^2 \times 320,04 \text{ cm} \checkmark \text{SF}$ $r^2 = 15\,000\,000\text{cm}^3 \div (3,142 \times 320,04\text{cm}) \checkmark \text{MA}$ $r = \sqrt{\frac{15\,000\,000}{3,142 \times 320,04}} \checkmark \text{MCA}$ radius $= 122,1350764 \text{ cm} \checkmark \text{CA}$ $\approx 122,135\text{cm}$ The claim is CORRECT $\checkmark \text{O}$ OR $1\text{m}^3 = 1\,000\text{m}\ell \checkmark \text{C}$ Convert to $\text{cm}^3 = 15\,000\text{m}\ell \div 1\,000 = 15\text{m}^3 \checkmark \text{A}$ $15\text{m}^3 = 3,142 \times r^2 \times 3,2004\text{m} \checkmark \text{SF}$ $r^2 = 15 \text{ m}^3 \div (3,142 \times 3,2004\text{m}) \checkmark \text{MA}$ $r = \sqrt{\frac{15}{3,142 \times 3,2004}} \checkmark \text{MCA}$ radius $= 1,221350764\text{m} \times 100 \checkmark \text{C}$ $= 122,1350764 \text{ cm} \checkmark \text{CA}$ $\approx 122,135\text{cm}$ The claim is CORRECT $\checkmark \text{O}$	CA from Question 4.1.1 1C multiplying by 1 000 1A simplification 1C multiply by 100 1SF correct substitution 1MA changing the subject 1MCA square root 1CA Simplification 1O conclusion OR 1C dividing by 1 000 1A simplification 1SF correct substitution 1MA changing the subject 1MCA square root 1C multiplying by 100 1CA Simplification 1O conclusion	M L4 D

	OR Convert to $\text{cm}^3 = 15\,000 \times 1\,000 \checkmark \text{C}$ $= 15\,000\,000 \text{ cm}^3 \checkmark \text{A}$ Height of tank = $3,2004\text{m} \times 100 \checkmark \text{C}$ $= 320,04 \text{ cm}$ $\checkmark \text{A}$ Volume = $3.142 \times (122,135\text{cm})^2 \times 320,04 \text{ cm} \checkmark \text{SF}$ $= 14\,999\,981,241 \text{ cm}^3 \checkmark \text{CA}$ $\checkmark \text{R}$ The volume is approx. $15\,000\,000 \text{ cm}^3$, The claim is CORRECT $\checkmark \text{O}$ OR Height of tank = $3,2004\text{m} \times 100 \checkmark \text{C}$ $= 320,04 \text{ cm}$ $\checkmark \text{A}$ Volume = $3.142 \times (122,135\text{cm})^2 \times 320,04 \text{ cm} \checkmark \text{SF}$ $= 14\,999\,981,241 \text{ cm}^3 \checkmark \text{CA}$ $1\,000 \text{ cm}^3 = 1 \ell$ Capacity = $14\,999\,981,241 \text{ cm}^3 \div 1\,000 \checkmark \text{C}$ $= 14\,999,98 \ell \checkmark \text{CA}$ The capacity is approx. $15\,000 \ell \checkmark \text{R}$ The claim is CORRECT $\checkmark \text{O}$	OR 1C multiplying by 1000 1A Simplification 1C multiplying by 100 1A correct radius 1SF correct substitution 1CA Simplification 1R correct rounding 1 O conclusion OR 1C multiplying by 100 1A correct radius 1SF correct substitution 1CA Simplification 1C dividing by 1 000 1CA Simplification 1R correct rounding 1O conclusion (8)	
4.1.3	$\checkmark \text{RT}$ $1,70\text{m} : 3,2004\text{m} \checkmark \text{CA}$ $1 : 1,88 \checkmark \text{R}$ OR $\checkmark \text{RT}$ $170\text{cm} : 320,04\text{cm} \checkmark \text{CA}$ $1 : 1,88 \checkmark \text{R}$	CA from Question 4.1.1 1RT comparison in correct order 1CA height of the tank 1R correct rounding OR 1RT comparison in correct order 1CA height of the tank 1R correct rounding (3)	MP L2 M
4.1.4	The man is used in the advert as a visual reference point because people can easily relate to the height and size of a person. $\checkmark \checkmark \text{O}$ OR By comparing the man to the tank, potential customers can better judge the tank's actual size. $\checkmark \checkmark \text{O}$ OR This visual comparison makes it easier for customers to understand how high the tank is and whether it will be suitable for their water storage needs. $\checkmark \checkmark \text{O}$	2O correct explanation (2)	MP L4 E

4.2.1	✓C Convert height to cm = $122\text{mm} \div 10 = 12,2\text{cm}$ Convert diameter to cm = $66,2\text{mm} \div 10 = 6,62\text{cm}$ ✓A Radius = $6,62\text{cm} \div 2$ ✓MCA = $3,31\text{cm}$ ✓CA Surface Area of an open cylinder ✓MA ✓SF = $3,142 \times (3,31\text{cm})^2 + (2 \times 3,142 \times 3,31\text{cm} \times 12,2\text{cm})$ = $288,1845 \dots \text{cm}^2$ $\approx 289\text{cm}^2$ ✓R OR Radius = $66,2\text{mm} \div 2$ ✓MA = $33,1\text{mm}$ ✓A Surface Area of an open cylinder ✓MA ✓SF = $3,142 \times (33,1\text{mm})^2 + (2 \times 3,142 \times 33,1\text{mm} \times 122\text{mm})$ ✓A = $28818,4554 \dots \text{mm}^2 \div 10^2$ ✓C = $288,184 \dots \text{cm}^2$ $\approx 289\text{cm}^2$ ✓R OR	1C divide height by 10 1A simplification 1MCA divide diameter by 2 1CA simplification 1MA open cylinder formula 1SF correct substitution 1R correct rounding OR 1MA divide diameter by 2 1A simplification 1MA open cylinder formula 1SF correct substitution 1A simplification 1C divide by 10^2 1R correct rounding OR	M L2 M
	✓C Convert height to cm = $122\text{mm} \div 10 = 12,2\text{cm}$ Convert diameter to cm = $66,2\text{mm} \div 10 = 6,62\text{cm}$ ✓A Radius = $6,62\text{cm} \div 2$ ✓MCA = $3,31\text{cm}$ ✓CA Surface Area of an open cylinder ✓SF = $2 \times 3,142 \times (3,31\text{cm})^2 + (2 \times 3,142 \times 3,31\text{cm} \times 12,2\text{cm})$ – $(3,142 \times (3,31\text{cm})^2)$ ✓MA = $288,184 \dots \text{cm}^2$ $\approx 289\text{cm}^2$ ✓R OR	1C divide height by 10 1A simplification 1MCA divide diameter by 2 1CA simplification 1SF correct substitution 1MA subtract for open cylinder formula 1R correct rounding OR	

	Radius = $66,2\text{mm} \div 2$ ✓MA = $33,1\text{mm}$ ✓A Surface Area of an open cylinder ✓SF = $2 \times 3,142 \times (33,1\text{mm})^2 + (2 \times 3,142 \times 33,1\text{mm} \times 122\text{mm})$ – $(3,142 \times (33,1\text{mm})^2)$ ✓MA ✓CA = $28818,4554\dots\text{mm}^2 \div 10^2$ ✓C = $288,184\dots\text{cm}^2$ ≈ 289cm^2 ✓R	1MA divide diameter by 2 1A simplification 1SF correct substitution 1MA open cylinder formula 1CA simplification 1C divide height by 10^2 1R correct rounding (7)	
4.2.2	$500\text{m}\ell = 0,5\ell$ ✓MA Total Surface Area = $289\text{cm}^2 \times 2 \times 25$ ✓MA = $14\,450\text{cm}^2$ ✓CA Total SA in $\text{m}^2 = 14\,450\text{cm}^2 \div 100^2$ ✓C = $1,445\text{m}^2$ Number of litres = $\frac{1,445}{5}$ ✓MCA = $0,289\ell$ ✓CA $0,289\ell < 0,5\ell$ OR $289\text{m}\ell < 500\text{m}\ell$ Her Claim is CORRECT. ✓O OR	CA from Question 4.2.1 1MA multiplying by 2 1MA multiply by 25 1CA simplification 1C divide by 100^2 1MCA divide by 5 1CA simplification 1O conclusion OR	M L4 M

Convert SA to $\text{m}^2 = 289\text{cm}^2 \div 100^2 = 0,0289\text{m}^2$ ✓A ✓MA Total Surface Area = $0,0289\text{m}^2 \times 2 \times 25$ ✓MA $= 1,445\text{m}^2$ ✓CA Number of litres = $\frac{1,445}{5}$ ✓MCA $= 0,289\ell$ ✓CA $0,289\ell < 0,5\ell$ OR $289\text{ml} < 500\text{ml}$ Her Claim is CORRECT. ✓O OR ✓MA Total Surface Area = $289\text{cm}^2 \times 2 \times 25$ ✓MA $= 14\,450\text{cm}^2$ ✓CA Number of litres = $\frac{14\,450}{5 \times 100^2}$ ✓MCA ✓C $= 0,289\ell$ ✓CA $0,289\ell < 0,5\ell$ OR $289\text{ml} < 500\text{ml}$ Her Claim is CORRECT. ✓O	1A correct SA 1MA multiplying by 2 1MA multiply by 25 1CA simplification 1MCA divide by 5ℓ 1CA simplification 1O conclusion OR 1MA multiplying by 2 1MA multiply by 25 1CA simplification 1MCA divide by 5ℓ 1C divide by 100^2 1CA simplification 1O conclusion (7)	
	[32]	

QUESTION 5 [30 MARKS]			
Ques	Solution	Explanation	T&L
5.1	11 June to 30 June = 20 days ✓A 1 July to 19 July = 19 days Number of days = 20 + 19 ✓MA = 39 ✓CA	1A for 20 days 1MA adding both days 1CA simplification AO (3)	MP L2 M
5.2	$\text{Probability (Mexico Stadium)} = \frac{\overset{\check{A}}{3}}{\underset{\check{A}}{16}}$ = 0,1875 ✓CA	1A for numerator 1A for denominator 1CA simplification (3)	P L2 M
5.3	Line/linear/bar/graphic scale ✓RT ✓A ✓RT 1,9cm on the map represents 400 miles in reality OR ✓A ✓RT 19mm on the map represents 400 miles in reality	1RT correct type of scale 1A correct measurement 1RT correct scale value in miles (3)	MP L2 E
5.4	Map distance = 13,2cm ✓A $\text{Number of miles} = \frac{\overset{\check{MCA}}{400 \times 13,2\text{cm}}}{\underset{\check{MA}}{1,9\text{cm}}}$ = 2 778,947368 miles ✓CA Number of km = 2 778,947368 miles × 1,609 ✓C = 4 471,3263 ...km ✓CA 4 711km > 4 471,33km The claim is NOT CORRECT/INCORRECT. ✓O OR Map distance = 132mm ✓A $\text{Number of miles} = \frac{\overset{\check{MCA}}{400 \times 132\text{mm}}}{\underset{\check{MA}}{19\text{mm}}}$ = 2 778,947368 miles ✓CA Number of km = 2 778,947368 miles × 1,609 ✓C = 4 471,3263 ...km ✓CA 4 711km > 4 471,33km The claim is NOT CORRECT/INCORRECT. ✓O	1A measured distance 13,2cm on the map 1MCA multiplying 13,2cm by 400 1MA dividing by 1,9cm 1CA simplification 1C multiply by 1,609 1CA simplification 1O conclusion OR 1A measured distance 132mm on the map 1MCA multiplying 132mm by 400 1MA dividing by 19mm 1CA simplification 1C multiply by 1,609 1CA simplification 1O conclusion	MP L3 M

	OR Map distance = 13,2cm ✓A Number of km (scale) = 400 miles × 1,609 ✓C = 643,6km ✓A Number of km (map) = $\frac{643,6km \times 13,2cm}{1,9cm}$ ✓MCA ✓MA = 4 471,3263 ...km ✓CA 4 711km > 4 471,33km The claim is NOT CORRECT/INCORRECT. ✓O OR Map distance = 132mm ✓A Number of km (scale) = 400 miles × 1,609 ✓C = 643,6km ✓A Number of km (map) = $\frac{643,6km \times 132mm}{19mm}$ ✓MCA ✓MA = 4 471,3263 ...km ✓CA 4 711km > 4 471,33km The claim is NOT CORRECT/INCORRECT. ✓O	OR 1A measured distance 13,2cm on the map 1C multiply by 1,609 1A simplification 1MCA multiplying 13,2cm by 643,6km 1MA dividing by 1,9cm 1CA simplification 1O conclusion OR 1A measured distance 132mm on the map 1C multiply by 1,609 1A simplification 1MCA multiplying 132mm by 643,6km 1MA dividing by 19mm 1CA simplification 1O conclusion Accept a leeway of 1mm (7)	
5.5	✓C Time in hours = $5 + \frac{30min}{60min}$ = 5,5 hours Speed by plane = $\frac{4\,120\,km}{5,5\,hours}$ ✓MA = 749,09 km/h ✓CA Speed by car = $\frac{4\,680\,km}{43\,hours}$ ✓MA = 108,84 km/h Number of times faster = 749,09 km/h ÷ 108,84 km/h ✓MCA = 6,88 ... times ✓CA The claim is INCORRECT/NOT CORRECT ✓O OR	1C divide by 60min 1MA dividing by 5,5h 1CA simplification 1MA dividing by 43h 1MCA divide by 108,84 1CA simplification 1O conclusion OR	MP L4 M

	$\text{Time in hours} = 5 + \frac{30\text{min}}{60\text{min}} = 5,5 \text{ hours} \quad \checkmark C$ $\text{Speed by plane} = \frac{4\,120 \text{ km}}{5,5 \text{ hours}} \quad \checkmark MA$ $= 749,09 \text{ km/h} \quad \checkmark CA$ $\text{Speed by car} = \frac{4\,680 \text{ km}}{43 \text{ hours}} \quad \checkmark MA$ $= 108,84 \text{ km/h} \quad \checkmark MCA$ $\text{Car Speed (7 times)} = 108,84 \times 7 = 761,88 \text{ km/h} \quad \checkmark CA$ $749,09 \text{ km/h} < 761,88 \text{ km/h}$ The claim is INCORRECT/NOT CORRECT $\checkmark O$ OR $\text{Time in hours} = 5 + \frac{30\text{min}}{60\text{min}} = 5,5 \text{ hours} \quad \checkmark C$ $\text{Speed by plane} = \frac{4\,120 \text{ km}}{5,5 \text{ hours}} \quad \checkmark MA$ $= 749,09 \text{ km/h} \quad \checkmark CA$ $\text{Speed by car} = \frac{4\,680 \text{ km}}{43 \text{ hours}} \quad \checkmark MA$ $= 108,84 \text{ km/h} \quad \checkmark MCA$ $\text{Car Speed (7 times)} = 749,09 \div 7 = 107,0128... \text{ km/h} \quad \checkmark CA$ $107,0128 \text{ km/h} < 108,84 \text{ km/h}$ The claim is INCORRECT/NOT CORRECT $\checkmark O$	1C divide by 60min 1MA dividing by 5,5h 1CA simplification 1MA dividing by 43h 1MCA multiply 108,84 by 7 1CA simplification 1O conclusion OR 1C divide by 60min 1MA dividing by 5,5h 1CA simplification 1MA dividing by 43h 1MCA multiply 108,84 by 7 1CA simplification 1O conclusion (7)	
5.6	$32^{\circ}\text{C} = \frac{5}{9} \times (^{\circ}\text{F} - 32) \quad \checkmark SF$ $^{\circ}\text{F} = (32^{\circ}\text{C} \times \frac{9}{5}) + 32 \quad \checkmark MA$ $^{\circ}\text{F} = 57,6 + 32 \quad \checkmark MA$ $^{\circ}\text{F} = 89,6 \quad \checkmark CA$ $^{\circ}\text{F} \approx 90 \quad \checkmark R$	1SF correct substitution 1MA change subject of formula 1MA adding 57,6 1CA simplification 1R rounding (5)	M L2 M

5.7	Los Angeles, Dallas and Miami are far apart, so travelling between the cities will take considerable time. ✓✓O OR The supporter must allow enough time to travel from one host city to the next before the next match. ✓✓O OR Flights or other forms of transport would need to be booked in advance. ✓✓O OR The supporter would need to consider the dates and times of the matches when planning each journey. ✓✓O OR Flight delays, transport demands, traffic or other disruptions could affect the travel schedule. ✓✓O	20	correct explanation	MP L4 M
			(2)	
			[30]	

TOTAL MARKS: 150

**ANALYSIS GRID OF COGNITIVE LEVELS MATHS LIT P2 PREPARATORY EXAMINATION
2026 – GRADE 12**

		MEAS	MPW	P	L1	L2	L3	L4		
Ques	Sub Ques	55%	40%	5%	30%	30%	20%	20%	Tot subq	Total Que
1	1.1.1	2			2				2	30
	1.1.2		2		2				2	
	1.1.3			2	2				2	
	1.1.4		2		2				2	
	1.1.5	2			2				2	
	1.2.1	2			2				2	
	1.2.2	2			2				2	
	1.2.3	3			3				3	
	1.2.4	2			2				2	
	1.2.5	3			3				3	
	1.3.1		2		2				2	
	1.3.2		2		2				2	
	1.3.3		2		2				2	
	1.3.4		2		2				2	
2	2.1.1		2		2				2	29
	2.1.2		2		2				2	
	2.1.3		4					4	4	
	2.1.4		2		2				2	
	2.2.1		4			4			4	
	2.2.2			3		3			3	
	2.2.3		2		2				2	
	2.3.1		2		2				2	
	2.3.2		2		2				2	
	2.3.3		2		2				2	
	2.3.4		4				4		4	
3	3.1.1	5				5			5	29
	3.1.2	3				3			3	
	3.1.3	4						4	4	
	3.2.1	3				3			3	
	3.2.2	9					9		9	
	3.2.3	3				3			3	
	3.2.4	2						2	2	

4	4.1.1	5				5			5	32
	4.1.2	8						8	8	
	4.1.3		3			3			3	
	4.1.4		2					2	2	
	4.2.1	7					7		7	
	4.2.2	7						7	7	
5	5.1		3			3			3	30
	5.2			3		3			3	
	5.3		3			3			3	
	5.4		7				7		7	
	5.5		7					7	7	
	5.6	5				5			5	
	5.7		2					2	2	
	ACTUAL	77	65	8	44	43	27	36	150	
	REQUIRED	82	60	8	45	45	30	30	150	150