LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

NATIONAL SENIOR CERTIFICATE

GRADE 11

MATHEMATICAL LITERACY

CONTROLLED TEST

MARKING GUIDELINES

MARCH 2026

Stanmorephysics.com

MARKS: 75

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 7 pages.

Copyright reserved

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 [30 MARKS]		ANSWER ONLY FULL MARKS	
Q	**Solution**	**Explanation**	**T&L**
1.1			
1.1.1	Fixed cost is an amount of money that remains constant regardless of producing or selling Cappuccino. ✓✓**O**	2O correct opinion (2)	F L1
1.1.2	Independent variable = No. of cups of Cappuccino coffee. ✓✓**A** Dependent Variable = Income in Rand ✓✓**A**	2A correct answer 2A correct answer (4)	F L1
1.1.3	Selling price = R12,50 ✓✓**A**	2A correct answer (2)	F L1
1.1.4	Income =R12,50×n ✓✓**A**	2A correct answer (2)	F L3
1.1.5	**P**: R12,50 × 40 ✓**A** = R500 ✓**A** **Q:** 12,50 × n = 1 250 ✓**A** $\frac{12,50 \times n}{12,50} = \frac{1\,250}{12,5}$ ✓**M** n =100 ✓**CA**	1A multiplying by 40 1A answer 1A correct substitution 1M division 1CA (5)	F L2
1.2			
1.2.1	= 2 cups × 250 ml✓ MA = 500 ml ✓**A**	1MA multiplication 1A simplification (2)	M L2
1.2.2	2:6✓**MA** 1: 3 ✓**A**	1MA correct items 1CA simplification (2)	M L2

Stanmorephysics.com

1.2.3	6 eggs make 18 sponge cakes 72 sponge cakes will take No. of eggs = $\frac{72 \times 6}{18}$ eggs ✓**A** = $\frac{432}{18}$ ✓**A** = 24 eggs ✓**CA** **OR** No. of eggs = 72 ÷18 ✓**A** = 4 × 6 ✓**A** = 24 ✓**CA**	1A multiplication 1A numerator and denominator 1CA simplification **OR** 1A dividing by 18 1A multiplying by 6 1CA simplification (3)	M L1
1.2.4	2 × 250ℓ = 500mℓ ✓ **MA** 500mℓ ÷ 1000 = 0.5ℓ ✓**CA**	1MA method 1A conversion (2)	M L1
1.2.5	$\frac{25\ minutes}{60}$ ✓**A** = 0,4167 Hours ✓**A**	1A dividing by 60 1A conversion (2)	M L2
1.2.6	380 ºF = (1,8 × ºC) + 32✓**A** 380 - 32 = 1,8✓**MA** C = $\frac{348}{1,8}$ ✓**A** = 193.33 ºC ✓**A**	1A correct substitution 1MA correct values 1A dividing correct values 1CA simplification (4)	M L3
		[30]	

Stanmorephysics.com

QUESTION 2 [24 marks]		Answer Only Full Marks	
Ques	**Solution**	**Explanation**	**T&L**
2.1			
2.1.1	1,2 hours = 1 hour and 0,2 of an hour = 1 hour and 0, 2 × 60 minutes. ✓**M** = 1 hour and 12 minutes ✓**A**	1M multiplying by 60 min 1A correct answer (2)	M L1
2.1.2	Time taken = 1h39min 04 sec – 1h23min 12 sec ✓**M** = 1h38 min 64 sec ✓**C** – 1h23 min 12 sec = 15 minutes 52 seconds ✓**CA**	1M subtracting correct values 1C conversion 1CA correct Answer (3)	M L2
2.2			
2.2.1	The total distance around the edge or boundary that outlines the pool.✓✓**A**	2A Definition of perimeter (2)	M L1
2.2.2	r = $\frac{5{,}5m}{2}$ = 2,75 m ✓**A** Length = 2(1,5 m) + 9 m + 2,75 m = 14,75 m✓**CA** For two sides = 2 × 14,75 m = 29,5 m ✓**A** Width = 2(1,5 m) + 5,5 m = 8,5 m For two sides = 2 × 8,5 m = 17 m ✓**A** Perimeter = 29.5 m + 17 m = 46,5 m ✓**CA**	1A radius 1CA length of one side 1A length of two sides 1A width of the two sides 1CA correct answer (5)	M L4
2.2.3	Number of Rolls = 46,5 m ÷ 5 ✓**M** = 9,3 = 10 rolls ✓**R** Cost of rolls = R162,50 × 10 ✓**M** = R1 625,00 ✓**CA**	1 M dividing by 5 1R rounding up 1M multiplying by R162,50 1CA answer (4)	M L3

Stanmorephysics.com

2.2.4	No. of poles on the length = 14,75m ÷ 1,8m = 8 poles including the corner poles ✓**A** The other side of the length will have 8 poles including corner poles. No. of poles on the width = 8,5m ÷ 1,8 m = 5 poles ✓**A** The side on the width side will have 3poles in the middle because the corner poles are already counted. The other side on the width will also have 3 poles in the middle. ✓**A** Total number of poles = 2(8) + 2 (3) = 22 poles ✓**CA**	1A no. of poles on one side of the length (if a learner rounded up mark it correct) 1A No. of poles on the width (if a learner rounded down mark it correct) 1A excluding corner poles 1CA Answer (4)	M L4
2.2.5	Cheapest Cost = 3 × R500 ✓**A** + 4 × R98 ✓**A** = R1500 +R392 = R1 892✓**CA**	**CA from 2.2.4** 1A multiplying R500 by 3 1A multiplying R98 by 4 1CA answer (3)	F L2
		[24]	
QUESTION 3 [25 MARKS]			
3.1			
3.1.1	Amount of space in a bucket occupied by water.✓✓**A**	2A Accept any sensible explanation. (2)	M L2
3.1.2	18,46 × 1 000 ✓**C** = 18 460 cm³ ✓**A** 18 460 ✓**SF**= 30 × 22 × *h* ✓**SF** h = $\frac{18\,460}{660}$ ✓**M** ∴ h = 28 cm ✓**CA**	1C multiplying by 1 000 1A answer 1SF for volume 1SF for length and width 1M changing subject of formula 1CA rounded answer (6)	M L4
3.1.3	Circumference = 3,142 × 44 ✓✓**SF** = 138,248 cm	2SF correct values (2)	M L1

3.2			
3.2.1	Prevents rapid loss of heat ✓✓**2O**	2O Opinion (2)	M L3
3.2.2	Radius = $\frac{44}{2}$ ✓**MA** = 22 cm ✓**A**	1MA dividing by 2 1A correct answer (2)	M L2
3.2.3	h = $\frac{380}{10}$ ✓**C** = 38 cm ✓**A** Area = 2 × 3,142 × 22 × 38 ✓**SF** = 5 253,42✓ CA cm²✓**A**	**CA radius from 3.2.2** 1C dividing by 10 1A correct answer 1SF correct values 1CA correct answer 1A correct unit **NPR** (5)	M L4
3.2.4	V = 3,142 × $(22)^2$ × 38 ✓**SF** = 57 787,66 cm^3 ✓**CA**	**CA radius from Q3.2.2 and height from Q3.2.3** 1SF values CA final answer (2)	M L2
3.3	Number of buckets = $\frac{57\,787,66}{18,46}$ ✓**MCA** ✓**A** = 3,13 ✓**CA** = 4 buckets ✓**R**	**CA from 3.2.4** 1MCA numerator 1A denominator 1CA answer 1R rounding up (4)	M L3

QUESTION 4 [21 MARKS]

Q	Solution	Explanation	T&L
4.1			
4.1.1	A plan on how Mr David will spend his money ✓✓**O**	2O explanation (2)	F L2
4.1.2	Total income = R33 150 + R1 625 ✓**MA** = R34 775 ✓**CA**	1MA addition 1CA answer (2)	F L1
4.1.3	B = R7 927,86 – (R375 + R850,25 + R1 500) ✓**MA** = R5 202,61 ✓**CA**	1MA for subtracting correct values 1CA answer (2)	F L1

4.1.4	Detergents: Electricity 375 : 1500 ✓**A**✓**M** 1 : 4 ✓**CA**	1M correct order 1A correct values 1CA answer (3)	F L2
4.1.5	Percentage of total expenses $= \frac{850,25}{7927,86}$ ✓**MA** ×100% ✓**M** = 10,72% ✓**CA**	1MA correct numerator & denominator 1M multiplying by 100% 1CA simplification (3)	F L3
4.2			
4.2.1	They are exempted from VAT/zero rated item ✓✓**A**	2RO (2)	D L2
4.2.2	ENT.Bacon/egg = R49,99 × 0,458 kg ✓**A**✓**M** = R22,89542 ✓**A** ≈ R22,90	1A correct values 1M multiplying correct values 1A simplification (2)	D L1
4.2.3	Amount including VAT = R160.27 × 1.15 = R184.3105 ✓**CA** VAT amount = R184.3105 – R160.27 ✓**MA** = R24.04 ✓**A** VAT calculations not correct✓**O**	1CA Amount incl VAT 1MA subtracting 160,27 1A simplification 1O correct statement (4) **NPR**	F L4
		[21]	

TOTAL = 100

Stanmorephysics.com