



Education
KwaZulu-Natal Department of Education
REPUBLIC OF SOUTH AFRICA

MATHEMATICAL LITERACY P1

COMMON TEST

JUNE 2017

MARKING GUIDELINE

**NATIONAL
SENIOR CERTIFICATE**

GRADE 10

MARKS: 50

Symbol	Explanation
M	Method
M/A	Method with Accuracy
CA	Consistent Accuracy
A	Accuracy (Answer)
C	Conversion
S	Simplification
RT / RG / RM	Reading from table / Reading from graph / Reading from map
F	Choosing the correct formula
SF	Substitution in formula
O	Opinion
P	Penalty e.g. for no units, incorrect rounding, etc
R	Rounding off / Reason
U	Unit
AO	Answer only full marks

This marking guideline consists of 6 pages.

QUESTION 1 [9 marks]

Ques	Solution	Explanation	Topic/L
1.1.1	Time from 12h00 to 23h00 = 11 hours ✓✓A	2A answer	F L1 (2)
1.1.2	Daily wage = $11 \times R18,00$ ✓M = R198 ✓CA Weekly wage = $5 \times R198,00$ = R990,00 ✓CA OR Weekly wage = $11 \times R18,00 \times 5$ ✓M = R990,00 ✓CA	1M multiplying ICA daily wage ICA weekly wage ICA 11 hour 1M multiplying ICA weekly wage AO (3)	F L2
1.2.1	$P_{\text{back}} = 0 \checkmark \checkmark A$	2A solution	P L1 (2)
1.2.2	$P_{\text{white}} = \frac{3}{25} \checkmark A$	1A numerator 1 denominator	P L2 (2) [9]

Ques	Solution	Explanation	Topic/L
2.1.1	Expenses = R9 879,45 + R200 + R245 + R650 + R950 + R690 + R990 + R780 + R300 = R14 684,45 ✓A	IM adding IA solution AO (2)	F L1
2.1.2	Amount left = R12 550,00 – R10 684,70 ✓M = R1865,30 ✓A	IM subtracting IA solution Answer Only AO (no penalty if reversed with positive answer) (3)	F L1
2.1.3	% spent on clothing = $\frac{900}{12\,550} \times 100\%$ ✓M = 7,17% ✓A	IM % concept IA solution AO (2)	F L1
2.1.4	Number of litres petrol = $\frac{R950}{R11,95}$ ✓M = 79,4979... ✓A = 79 ✓R	IM dividing IA simplification IR rounding AO (3)	F L1
2.1.5	6,3 litres : 100 km ✓M 45 litres will cover: $\frac{45}{6,3} \times 100$ km ✓A = 714,2857... = 710 km ✓A	IM ratio concept IA × 100 IR rounding AO (3)	F L2

Ques	Solution	Explanation	Topic/L
2.2.1	1 hour ✓✓RG	2RG reading (2)	F L1
2.2.2	More than 3 hours but less than 4 hours ✓✓RG	2RG reading (2) (accept any time between 3 - 4 hours)	F L1
2.2.3	R20,00 ✓✓RG	2RG reading (2) 18	F L1

QUESTION 3 [12 marks]

Ques	Solution	Explanation	Topic/L
3.1.1	$\begin{aligned} \text{Perimeter} &= 12\text{ m} + 12\text{ m} + 6\text{ m} + 6\text{ m} + 18\text{ m} \\ &= 60\text{ m} \end{aligned}$ <p style="text-align: center;">OR</p> $\begin{aligned} \text{Perimeter} &= 2 \times (12\text{ m} + 18\text{ m}) \\ &= 60\text{ m} \end{aligned}$	1M adding 1A all values correct 1CA solution 1M adding 1A all values correct 1CA solution (omitting/extra 1 length max 2/3)	M L2
3.1.2	$\begin{aligned} \text{Area of the garden} &= 12\text{ m} \times 18\text{ m} - (6\text{ m} \times 6\text{ m}) \\ &= 216\text{ m}^2 - 36\text{ m}^2 \\ &= 180\text{ m}^2 \end{aligned}$ <p style="text-align: center;">OR</p> $\begin{aligned} \text{Area of the garden} &= 12\text{ m} \times 6\text{ m} + 18\text{ m} \times 6\text{ m} \\ &= 72\text{ m} + 108\text{ m} \\ &= 180\text{ m}^2 \end{aligned}$ <p style="text-align: center;">OR</p> $\begin{aligned} \text{Area of the garden} &= 6\text{ m} \times 6\text{ m} + 12\text{ m} \times 12\text{ m} \\ &= 36\text{ m} + 144\text{ m} \\ &= 180\text{ m}^2 \end{aligned}$	1M subtracting 1SF substitution 1A simplification 1CA solution 1M addition 1SF substitution 1A simplification 1CA solution 1M addition 1SF substitution 1A simplification 1CA solution	M L2
3.2.1	$\begin{aligned} \text{Diameter} &= 2 \times 2,5\text{ m} \\ &= 5\text{ m} \end{aligned}$	1MA diameter concept 1A diameter <div style="border: 1px solid black; padding: 2px; display: inline-block;">AO</div>	M L1
3.2.2	$\begin{aligned} \text{Circumference} &= 2 \times 3,142 \times 2,5\text{ m} \\ &= 15,71\text{ m} \end{aligned}$ <p style="text-align: center;">OR</p> $\begin{aligned} \text{Circumference} &= 3,142 \times 5 \\ &= 15,71\text{ m} \end{aligned}$	1SF substitution 1A solution 1A unit 1SF substitution 1A solution 1A unit	M L2

QUESTION 4 [11 marks]

Ques	Solution	Explanation	Topic/L	
4.1	$\begin{aligned} &\checkmark\text{A} \\ &\checkmark\text{A} \end{aligned}$ <p style="text-align: center;">OR</p> $\begin{aligned} &\checkmark\text{A} \\ &\checkmark\text{A} \end{aligned}$	It is a diagram that determines where people should take their seats. It is a plan which shows where each person is to sit in a venue.	1A Diagram/Plan 1A Sit 1A Diagram/Plan 1A Sit	MP L1
4.2	11 $\checkmark\checkmark\text{A}$	2A answer	2A answer	MP L1
4.3	South East $\checkmark\checkmark\text{A}$ OR SE $\checkmark\checkmark\text{A}$	2A answer	2A answer	MP L1
4.4	$\begin{aligned} &\checkmark\text{A} \\ &4 \text{ and } 25 \end{aligned}$	1A for 4 1A for 25	1A for 4 1A for 25	MP L1
4.5	$\begin{aligned} &\checkmark\text{A} \\ &\checkmark\text{A} \end{aligned}$	- Turn right towards the back of the class. - Turn left and pass seat 4 & 25 - Turn left to the aisle and Funku will be seated on the right.	1A initial procession 1A direction at the back 1A final destination	MP L3

TOTAL MARKS: 50

