



Education and Sport Development

Department of Education and Sport Development

Departement van Onderwys en Sport Ontwikkeling

Lefapha la Thuto le Tihabololo ya Metshameko

NORTH WEST PROVINCE

GRADE 10

MATHEMATICAL LITERACY P1

JUNE 2019

MARKING GUIDELINE

MARKS: 50

SYMBOL	EXPLANATION
M	Method
M/A	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT/RG	Reading from a table/Reading from a graph
F	Choosing the correct formula
SF	Correct substitution in a formula
O	Opinion/Example
P	Penalty, e.g. for no units, incorrect rounding off etc.
R	Rounding off
J	Justification/Reason
NPR	No Penalty for rounding off.

This marking guideline consists of 4 pages

Marking guideline

QUESTION 1 [9 Marks]			
Ques	Solution	Explanation	TL
1.1	1280 : 40 ✓ 32 : 1 ✓	1MA correct order 1A simplification (2)	L1
1.2	Seventeen million and three thousand four hundred and sixty seven. ✓✓	2A number in words (2)	L1
1.3	Amount = R1 450 × $\frac{3}{5}$ ✓ = R870 ✓	1MA multiplying 1A answer (2)	L1
1.4	No of boxes = $\frac{45}{12}$ ✓ = 3,75 ✓ = 4 boxes ✓	1M dividing correct values 1A simplification 1CA Rounding up (3)	L1
QUESTION 2 [8 Marks]			
2.1	Entertainment = R250 ✓✓	2RT for answer (2)	L1
2.2	Rent ✓✓	2RT for answer (2)	L1
2.3	Income = R3 800 + R1 800 ✓ = R5 600 ✓	1A addition 1A answer (2)	L1
2.4	$= \frac{1500}{4450} \times 100\%$ ✓ = 33,71 % ✓	1MA method 1A answer NPR (2)	L1
QUESTION 3 [12 Marks]			
3.1	Kettle ✓✓	2RT for answer (2)	L1
3.2	78kWh ✓✓	2RT for answer (2)	L1
3.3	A = 310,36 - ✓(1,96+36+ 30+ 15+78+14,4) ✓ = 135kWh ✓ OR $A = \frac{177,48}{131,46} \times 100$ ✓✓ = 135 kWh ✓	1A subtraction 1A addition 1A for answer (3) 1A dividing 1A conversion 1A for answer	L1
3.4	Cost excluding VAT $= \frac{R408,02}{1,14}$ ✓ = R357,91 ✓	1MA dividing 1A simplification (2)	L2

3.5	MC= Watts ×no of hours ×no of days ×cents /kWh $= \frac{80}{1000} \checkmark \times 6 \times 30 \checkmark \times \frac{131,46}{100} \checkmark$ $= R18, 93$	1M 80 dividing by 1 000 1M 6 multiplying by 30 1M 131,46 dividing 100 (3)	L3
QUESTION 4 [11 marks]			
4.1	Area = length × width $= 8 \text{ m} \times 1,5 \text{ m} \checkmark$ $= 12 \text{ m}^2 \checkmark$	1A substitution 1A answer (2)	L2
4.2	$\text{Length} = \frac{20}{100}$ $= 0,2 \text{ m} \checkmark$ $\text{Width} = \frac{10}{100}$ $= 0,1 \text{ m} \checkmark$ Area = length × width $= 0,2 \text{ m} \times 0,1 \text{ m} \checkmark$ $= 0,02 \text{ m}^2 \checkmark$ OR $= 20 \text{ m} \times 100 \text{ m} \checkmark$ $= 200 \text{ m}^2 \checkmark$ $= \frac{200 \text{ m}^2}{10000} \checkmark$ $= 0,02 \text{ m}^2 \checkmark$	1C conversion 1C conversion 1CA substitution 1CA answer (4)	L2
4.3	$\text{No of bricks} = \frac{12 \text{ m}^2}{0,02 \text{ m}} \checkmark$ $= 600 \checkmark$	1CA dividing from 4.1 and 4.2 1CA answer (2)	L1
4.4	$\text{Radius} = \frac{1,5 \text{ m}}{2}$ $= 0,75 \text{ m} \checkmark$ Area of a circle = πr^2 $= 3,142 (0,75 \text{ m})^2 \checkmark$ $= 1,77 \text{ m}^2 \checkmark$	1A radius 1CA substitution 1CA answer NPR (3)	L2
QUESTION 5 [10 marks]			
5.1	10 gates $\checkmark \checkmark$	2RT for answer (2)	L1
5.2	Gate 6 $\checkmark \checkmark$	2RT for answer (2)	L1
5.3	From Block 14, move up to Y19 \checkmark and turn to right until Y23. \checkmark	1A diagonal 1A left (2)	L2

Marking guideline

5.4	$\begin{aligned} \text{Actual length} &= 7 \times 2\,000 \checkmark \\ &= 14\,000 \text{ cm} \checkmark \\ &= \frac{14\,000}{100} \\ &= 140 \text{ m} \checkmark \end{aligned}$	1 M multiplying 1CA simplifying 1CA conversion 1CA answer (4)	L2
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LEVELS	QUES 1	QUES 2	QUES 3	QUES 4	QUES 5	TOTAL	%
L1	9	8	6	2	4	29	58
L2			3	9	6	18	36
L3			3			3	6
TOTAL	9	8	12	11	10	50	100%