

# **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

#### NATIONAL SENIOR CERTIFICATE

### **GRADE 10**

## MATHEMATICAL LITERACY P2 JUNE EXAMINATION 2019 MARKING GUIDELINE

#### MARKS: 50

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

This marking guideline consists of 4 papers.

Ques1	Explanation	Explanation	TL
1.1	Area = $L \times B$	1 Conversion	2
	$= 3~700 \mathrm{mm} \times 600 \mathrm{mm} \checkmark$	1 substitution	
	$= 2 \ 220 \ 000 \ \mathrm{mm}$	1 A	
	$= 222 \ 000 \text{cm}^2 \checkmark$	(3)	
1.2	One wheel barrow = $2 \text{ cm}^2$ of tar	1	3
		Multiplication	
	The area for one Speed Hump = $40 \text{ cm}^2$	1 CA	
	40	1 CA	
	$\therefore$ to build one Speed Humps = $\frac{1}{2}$		
	$= 20\checkmark$ wheel barrows will be need		
	But for 4 for four Speed humps the contractor needs : $20 \times 4$		
	= 160 wheel barrows $\checkmark$	(3)	
1.3	One Speed Hump = $R3 405,00$	1	2
	Four Speed Humps = R3 405,00 $\times$ 4 $\checkmark$	Multiplication	
	= R13 620,00✓	1 A	
		(2)	
1.4	To be visible to drivers $\checkmark \checkmark$	2 Opinion	4
	Any relevant answer	(2)	
1.5	a. To reduce accidents $\checkmark \checkmark$	4 Reasons	4
	b. To reduce speed of speeding cars $\checkmark \checkmark$		
	Any relevant answer		
		(4)	
		[14]	

Ques2	Explanation	Explanation	TL
2.1.1	Fee for $2017(A) = R3,00 + R1,30 / R100$	1SF	3
	$= R3,00 + 0,013 \times R500 \checkmark \checkmark$	1M Multiply	
	= R3,00 + 6,5	by 500	
	$= R9,50\checkmark$	1CA	
	Fee for $2018 = R10,70$	1CA	
	Difference in price = $R10,70 - R9,50$	Difference	
	$=$ R1,20 $\checkmark$		
	OR		
	Fee for $2017(A) = 1,3 \times 5\checkmark + 3\checkmark$		
	$= R9,50\checkmark$		
		1M Multiply	
	Fee for $2018 = R10,70$	by 5	
	Difference in price = $R10,70 - R9,50$	1M addition of	
	$=$ R1,20 $\checkmark$	3	
		1CA	
		1CA	
		Difference	
		(4)	

2.1.2	Percentage change: Withdrawal (Own Bank) $= \frac{10,70-10,45}{10,45} \times 100\% \checkmark$ $= 2,4\% \checkmark$ Percentage change: Withdrawal(Other Bank) $= \frac{16,70-16,45}{16,95} \times 100\%$ $= 1,5\% \checkmark$ 50% more $1,5 \times 1,5$ $= 2,25\% \checkmark$	1 Correct Formula 1 CA Percentage 1CA Percentage 1M 50% increase	4
	∴ 2,25% ≠2,4% Statement is invalid	10 (5)	
2.2.1	1 cup = 250 ml $6\frac{1}{4} = ?$ $6\frac{1}{4} \times 250 \checkmark$ =1 562,5 ml ✓ ∴ Mrs Moroke use 1 562,5ml of all-purpose flour ✓	1M multiply by 250 1A 1 concluding statement (3)	3
2.2.2	Perimeter = L + B + L + B = $22,86 + 12,7 + 22,85 + 12,7 \checkmark \checkmark$ = $71,12 \text{ cm}\checkmark$	1M substitution 1 addition 1A (3)	2
2.2.3	Total time = Mixing + Rising +Panning +Baking $8min +90min +30min \neq 30min \neq 158$ $\frac{158}{60} \neq 2,63333 \text{ hours} \neq 2hrs 38min \neq 38min \Rightarrow 38min \neq 38min \Rightarrow 38$	1M adding 1CA 1CA answer in hours 1CA conversion 1O (5)	4
		[20]	

Ques 3	Solution	Explanation	Level
3.1.1	Purchases for the month	1M adding	2
	=476,00+135,50+99,50+77,50+129,50+	purchases	
	57,00✓	1A	
	= R975,00✓	(2)	
3.1.2	Interest nor month $-$ 0,31	1M	3
	Interest per month = $\frac{12}{12}$	Divide by 12	
	= 0.025833333	1A Monthly	
	Interest on outstanding amount	interest	
	= 0.025833333 ×1215.80✓	1M Multilpy by 1	
	= R31, 40816667	215,80	
	≈R31.41 CA ✓	1CA Interest	
		amount	
	OR		
	31		
	Interest payable $\frac{1}{100} \times 1215,80\checkmark$		
	276		
	$=\frac{570}{12}\sqrt{2}$		
	≈R31,41✓	1M Multiplying	
		by 1 215,80	
		1A Annual interest	
		1M Diving by 12	
		1CA interest	
		Amount	
		(4)	
3.1.3	$B_{arcontago} = \frac{327,34}{4} \times 1000\%$	1M Numerator	2
	$\text{Percentage} = \frac{1}{1636.71} \mathbf{v} \times 100\% \mathbf{v}$	and Denominator	
	- 19 9998778%	1M Multiplying	
	= 20%	by 100	
	- 2070	1CA Percentage	
		(3)	
3.2.1	Enter through gate 5, at C5 turn left $\checkmark$	4 marks for the	
	go through club south until at C10 $\checkmark$	direction	4
	climb the stair to the next level and move to the		
	right✓	(4)	
	pass C10, C12 then you are at C13,C14 and C15 ✓		
3.2.2	No✓	1 mark for No	
	It was not convenient, they could have used Gate 6,	2 marks for reason	
	Gate7, Gate8 or Gate9 which were nearer or closer		
	to the seats in the stadium. $\checkmark\checkmark$		4
		(3)	
		[16]	

TOTAL = [50]