

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 P2 JUNE 2018 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
О	Opinion/Example
P	Penalty, e.g. for no units, incorrect rounding off etc.
R	Rounding off
J	Justification/Reason
NPR	No Penalty For Rounding
AO	Answer Only

This marking guideline consists of 4 pages

Ques 1	Solution	Explanation	Level
1.1.1	A=R32 100 + R3 000✓	1addition	2
	= R35 100✓	1answer (2)	
1.1.2	Savings = 15% × R35 100✓	1M multiplying by 15%	2
	= R5 265✓	1Answer	
	Value of B = $R8\ 000 + R1\ 650 + R645 + R525 +$	1M addition for all values	
	R500 + R2 000 + R570 + R2 000 + R1 200 +	1CA answer	
	R5 265 ✓ = R22 355 ✓	(4)	
1.1.3	Salary before increment:	1M multiplication by	3
	- 22 100 × 100 ×	correct fraction	
	$= 32\ 100 \times \frac{100}{106,8} \checkmark$	1answer	
	3210000		
	$=\frac{106.8}{106.8}$		
	= R30 056,18✓		
	OR	1M division	
	32 100 ÷ 1,068✓	1 answer	
	= R30 056,18✓	(2)	
1.1.4	They must change their budget and do it according	20 Reason	
1.1.1	to affordability. \checkmark	20 Reason	4
	OR		'
	They must differentiate between needs and wants.		
	√√		
	Any other relevant answer.	(2)	
1.2	Arrival Time = $07:10 - 06:30$	1Subtraction	2
	= 40 min√	1answer (2)	
		[12]	

Ques2	Explanation	Explanation	Level
2.1.1	Delivery cost = $R100 \checkmark + R1,50 \times n\checkmark$	1A R100	2
		$1A R1,50 \times n \tag{2}$	
2.1.2	Total costs for delivery = $100 + 414 \times 1,50 \checkmark$	1SF substitution	
	= R721,00 ✓	1CA answer (2)	2
2.1.3	Total cost of petrol= R14,55 + R0,43✓	1M for addition	
	= R14,98 ✓	1A new amount	
	He will pay = $R14.98 \times 65 \checkmark$	1M multiplication	3
	= R973,70✓	1answer (4)	
2.2	Area of the Parcel = length \times breath	1SF substitution	
	= 130 cm × 80 cm ✓	1answer	2
	$= 5 400 \text{ cm}^2 \checkmark$	(2)	
		[10]	

Ques3	Explanation	Explanation	Level
3.1	Guest to invite = $112\sqrt{-2}$	1RT number of seats	2
	= 110 guests √	1M of subtraction	
		1CA number of guests (3)	
3.2	For easy movement ✓ ✓	2O Reason	4
	OR		
	Uncomfortable to sit on the short side ✓ ✓		
	Any other relevant answer	(2)	
3.3	Walk pass the dance floor, pass the podium and	1A Pass the dance floor	4
	turn left. ✓✓	1A Direction (2)	
	OR		
	Any other relevant answer		
3.4	Floor Area for hall = length \times width	1SF Substitution	3
	= 15,5 m × 9 m✓	1CA Floor Area	
	=139,5 m ² ✓		
	Area of Dance floor $=\frac{1}{\sqrt{130.5}}$ m^2	1SF Substitution	
	Area of Dance floor = $\frac{1}{3} \times 139,5 \text{ m}^2 \checkmark$	1CA Area of dance floor	
	= 46,5 m ² ✓	(4)	
3.5	VAT amount = $R1349 \times \frac{14}{114}$	1M multiplying	
	$VAI \text{ amount} = R1349 \times \frac{V}{114}$	1A answer	2
	= R165,67√		
	OR		
	R1349		
	Price Excluding VAT = $\frac{R1349}{1,14}$		
	= R1 183,33✓	1A price Excluding VAT	
	- R1 183,33V VAT amount = R1 349 – R1 183,33	1A VAT amount	
	$= R 165,67 \checkmark$		
	- K 105,07	[13]	
		[13]	

Ques4	Calculations	Explanation	Level
4.1	1 mm = 50 mm	1M multiplying	3
	Then $370 \text{ mm} \times 50 = 1850 \text{ mm} \checkmark$	1Conversion	
	18 500 mm /1 000 √	1A	
	= 18,5m✓	(3)	
4.2.1	28:36✓	1M-ratio	2
	14:28	1A in simplified form	
	7:9✓	(2)	
4.2.2	28 + 36 = 64 ✓	1M addition of ratios	3
	Mpho: 1 280 ×28÷ 64✓	1M multiplication	
	$35\ 840 \div 64$	1A answer for Mpho	
	R560,00✓	1A answer for Tebogo	
	Tebogo: 1 280× 36÷ 64	_	
	46 080÷ 64		
	R720,00✓	(4)	

	OR			
	7 + 9 = 16			
	Mpho: $\frac{7}{16} \times R1 \ 282\checkmark$			
	= R560 √			
	Tebogo: $\frac{9}{16} \times R1 \ 280\checkmark$			
	= R720 √			
4.3.1	37 hours - 24 hrs = 13.	1M day		2
	Therefore it will take Mpho 1day ✓ and 13hrs. ✓	1M hours	(2)	
43.2	30 th June ✓	1A date		2
	23:00✓	1A time	(2)	
4.3.3	Resting✓✓	2R reason		4
	OR			
	Sight-seeing ✓✓			
	OR			
	Tyre puncture ✓ ✓		(2)	
	Any other relevant answer			
			[15]	

TOTAL [50]