

Hoërskool Johan Jurgens

Mathematical Literacy – Grade 10

Test

Term 1 - 2026



Examiner: M. Myburgh

Time: 1 hour

Moderator: M. Botha

Marks: 50

MARKING GUIDELINES

MARKS: 100

SYMBOL	EXPLANATION
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
J	Justification
RT	Reading from a table/graph/map/diagram
SF	Correct substitution in a formula
O	Opinion/Explanation/Reasoning
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 constant accuracy

These marking guidelines consist of 5 pages.

QUESTION 1 [17 MARKS]

Question	Solution	Explanation	M	L
1.1.	Four hundred twenty thousand and six hundred Rand ✓✓A	2A Amount in words	(2)	L1
1.2	The comma is a “thousands separator” (just like the space in 420 600). It is not a decimal comma. ✓✓E	2 E Explanation	(2)	L1
1.3	$= (\frac{8.2}{100} \times 420\,600) \checkmark M + 420\,600$ $= 34\,489.20 + 420\,600 \checkmark M$ $= R455\,089.20 \checkmark CA$	1M multiplying by 420 600 1M adding 420 600 1CA amount	(3)	L2
1.4.1	$30\% = \frac{30}{100} \checkmark S = 0.3 \checkmark A$	1S simplification 1A decimal	(2)	L1
1.4.2	$\frac{30}{100} \times 455\,089.20 \checkmark M$ $= R\,136\,526.70 \checkmark CA$	1M multiplying 455 089.20 from 1.3 1CA answer	(2)	L2
1.4.3	$100\% - 30\% \checkmark MA$ $= 70\% \checkmark A$	1MA subtracting 1A correct percentage	(2)	L2
1.4.4	$R455\,089.20 - R\,136\,526.70 \checkmark M$ $= R\,318\,562.50 \checkmark M$ $R\,318\,562.50 \div 12 \checkmark M$ $= R\,26\,546.88 \checkmark CA$	1M Subtracting R136526.70 from 1.4.2 1M Amount 1M dividing by 12 1CA monthly salary	(4)	L3
			[17]	

QUESTION 2 [13 MARKS]

Question	Solution	Explanation	M	L
2.1.	12ℓ/100 km means 12 litres of fuel are used ✓ for every 100 kilometres. ✓E	2 E Explanation	(2)	L1
2.2	12ℓ = 100 km 1ℓ = 679 km $\frac{100 \text{ l}}{100} = \frac{679 \times 12}{100} \checkmark \text{S}$ ℓ = 81.48 litres ✓CA ℓ = 81.5 litres ✓R	1S Simplification 1CA no. of litres 1R Rounding up	(3)	L2
2.3	12ℓ = 100km 1ℓ = 679km $\frac{12\text{km}}{12} = \frac{37 \times 100}{12} \checkmark \text{S}$ = 308.33km ✓CA = 308km ✓R	1Simplification 1CA Kilometres 1R Rounding down	(3)	L2
2.4	4500 ÷ 15 ✓MA = R 300 ✓A	1MA dividing by 15 1A Amount	(2)	L1
2.5	15 + 6 = 21 ✓ MA 4 500 ÷ 21 ✓ M = R 214. 29 = R 214.30 ✓ A	1MA adding no. of people 1M dividing by 21 1A Answer	(3)	L2
			[13]	

QUESTION 3 [14 MARKS]				
Question	Solution	Explanation	M	L
3.1.1	Flour : $0,9\text{kg} \times 1000$ $= 900\text{g} \checkmark \text{M}$ Total mass = $540\text{g} + 900\text{g} + 600\text{g} \checkmark \text{M}$ $= 2040\text{g} \checkmark \text{A}$	1M conversion 1M addition 1A accuracy	(3)	L1
3.1.2	$0,5\text{kg} \times 1000 \checkmark \text{M}$ $= 900\text{g} \checkmark \text{A}$ Therefore, 500g will not be enough $\checkmark \checkmark \text{C}$ OR $600\text{g} \div 1000$ $= 0,6\text{kg}$ Therefore, 0,5kg will not be enough.	1M method multiplication 1A answer 2C conclusion	(3)	L4
3.1.3	Nr. of bags = $540 \div 200 \checkmark \text{M}$ $= 2,7$ $= 3 \text{ bags of sugar} \checkmark \text{R}$ Cost = $3 \times \text{R}9.95 \checkmark \text{M}$ $= \text{R}29.85 \checkmark \text{CA}$	1M division 1R rounding 1M multiplication 1CA correct answer	(4)	L4
3.2.1	$200^\circ \text{C} - 120^\circ \text{C} \checkmark \text{M}$ $= 80^\circ \text{C} \checkmark \text{A}$	1M subtraction 1A accuracy	(2)	L3
3.2.2	The cake will absorb too much heat and will ultimately burn and become damaged.	2O opinion	(2)	L4
			[14]	

QUESTION 4 [6 MARKS]

Question	Solution	Explanation	M	L
4.1.	Total ratio = 12 John $\frac{3}{12} \times \frac{R4\ 800}{1}$ = R1 200 ✓✓ Thabo $\frac{5}{12} \times \frac{R4\ 800}{1}$ = R2 000 ✓✓ Mary $\frac{4}{12} \times \frac{R4\ 800}{1}$ = R1 600 ✓✓	2A accuracy 2A accuracy 2A accuracy	(6)	L3
			[6]	

TOTAL: 50

Bloom's Taxonomy				
Question	Level 1	Level 2	Level 3	Level 4
1.1	2			
1.2	2			
1.3		3		
1.4.1	2			
1.4.2		2		
1.4.3		2		
1.4.4			4	
2.1	2			
2.2		3		
2.3		2		
2.4	2			
2.5		3		
3.1.1	3			
3.1.2				4
3.1.3				4
3.2.1			2	
3.2.2				2
4.1			6	
TOTAL	13	15	12	10