



Hoërskool Johan Jurgens
Mathematical Literacy
Grade 10
November Exam Paper 1
MARKING GUIDELINES

Examiner: Ms. N. Gertenbach
Moderator: Mrs. M Botha

Time: 1 Hour 30 Minutes
Total: 75 marks

Question 1	Question 2	Question 3	Question 4	Total
_____ / 15	_____ / 26	_____ / 20	_____ / 14	_____ / 75

SYMBOL	EXPLANATION
M	Method
MA	Method with accuracy
MCA	Method with consistent accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
RT/RG	Reading from a table/graph/diagram
SF	Correct substitution in a formula
O	Opinion/Example/Definition/Explanation
P	Penalty, e.g. for no units/incorrect rounding off, etc.
R	Rounding off
NPR	No penalty rounding or omitting units
AO	Answer only, if correct, full marks

Question	Answer	Mark Allocation	Mark
Question 1			
1.1.1	VAT exempted items✓✓ OR No VAT included✓✓ OR Zero Rated✓✓	2A answer	(2)
1.1.2	Total hamburger buns = 8×6 ✓ = 48 ✓ = 48 buns ✓	2A answer 2AO	(2)
1.1.3	<i>Jellybeans: Chips</i> 25: 15✓ 5: 3✓	1 RT 1S	(2)
1.1.4	= $R1018.97 - R69.95$ ✓ = $R949.02 \times \frac{15}{100}$ ✓MCA = $R142.35$ ✓	1M Subtracting 1M Multiplication 1A Answer	(3)
1.2.1	Bar graph✓✓	2A answer	(2)
1.2.2	= $3 + 4 + 2 + 3 + 8 + 10 + 6 + 1$ + $7 + 8 + 4 + 7$ = 63 learners ✓✓	2A answer	(2)
1.2.3	May✓ & October✓	1A answer 1A answer	(2)
[15]			
Question 2			
2.1.1	<i>School fees</i> = $R1200 \div 12$ = $R100 \text{ per month}$ ✓ <i>per learner</i> ✓ <i>DSTV</i> = $R5200 \div 12$ = $R433.33 \text{ per month}$ ✓	1A answer 1A answer 1A answer	(3)
2.1.2	= $5000 + 1000 + 100 + 100 + 560$ + $1000 + 100 + 500$ + $160 + 000 + 279$ + $3500 + 3000$ + $1200 + 433.33$ = $R17932.33$ ✓✓	MCA 2A answer 2AO	(2)
2.1.3	$R17000 - R17932.33$ ✓ = $-R932.33 \text{ over}$ ✓	MCA 1M subtraction 1A answer	(2)

2.1.4	Ratio – 2:5 = Total 7 = $840 \times \frac{5}{7}$ ✓✓ = 600 watches ✓	2M Multiplication 1A answer 3AO	(3)
2.2.1	East London- Coastal R15,68/ℓ ✓✓	2A answer	(2)
2.2.2	$R4000 \div R15.68$ ✓ = 255.1ℓ ✓	1A answer	(2)
2.2.3	Reduce the entertainment cost ✓ and DSTV ✓. Both of them are a low priority expense ✓✓ OR Any reasonable answer	2A answer 2E explanation	(4)
2.3.1	$\frac{R55000}{R98000}$ ✓ × 100 ✓ = 56.12% loss ✓	1M division 1M multiplication 1A answer	(3)
2.3.2	$R55000 - R32500$ = R22500 left ✓ $R22500 \times \frac{1.75}{100}$ ✓ × 18 months ✓ = R7087.50 interest Total = R22500 + 7087.50 = R29587.50 ✓ No, he won't have enough ✓	1A answer 1M multiply interest 1M multiply 18 1A answer 1A answer	(5)
[26]			
Question 3			
3.1.1	Diameter = 6cm Radius = 3cm ✓✓	2A answer	(2)
3.1.2	Area of a circle = $\pi \times (\text{radius})^2$ = 3.142 ✓ × (3) ² ✓ = 28.278cm ² ✓	1SF substitution 1M Multiplication 1A answer 2AO	(3)
3.1.3	Volume = length × width × height = 17 × 13 × 25 ✓ = 5525cm ³ ✓	1SF substitution 1A Answer 2AO	(2)
3.1.4	$221\text{cm}^2 \times \frac{108}{100}$ ✓✓ = 238.68cm ² ✓	2M multiplication 1A answer	(3)
3.2.1	R50,00 ✓✓	2A answer	(2)
3.2.2	9 nails ✓✓	2A answer	(2)

3.2.3	$R650.00 \times 0.2m^2 \checkmark$ $= R130 \text{ per box} \checkmark$	1M multiplication 1A answer 2AO	(2)
3.2.4	$R130 + R4.50 + R2.50 + R50 \checkmark$ $= R187 \checkmark$	MCA 1M addition 1A answer 2AO	(2)
3.2.5	$R2000 \div R187 \checkmark$ $= 10.7 \text{ boxes}$ $\approx 10 \text{ boxes} \checkmark$	1M division 1R rounded answer	(2)
[20]			
Question 4			
4.1.1	12 rows $\checkmark \checkmark$	2A answer	(2)
4.1.2	28 seats $\checkmark \checkmark$	2A answer	(2)
4.1.3	6 seats $\checkmark \checkmark$	2A answer	(2)
4.1.4	7 seats to the right $\checkmark \checkmark$	2A answer	(2)
4.1.5	M3 $\checkmark \checkmark$	2A answer	(2)
4.1.6	<ul style="list-style-type: none"> • Walk down the steps towards the screen, to row A \checkmark • On the left are the wheelchair seats (A22, A21) \checkmark • Move to the left 9 seats to, A11 and A10 $\checkmark \checkmark$ 	1A row A 1A wheelchair seats 2A 9 seats (including wheelchair seats)	(4)
[14]			
TOTAL: 50 MARKS			

Investigation Bloom Taxonomy Marks: 75					
Question	Knowledge	Routine Procedures	Complex Procedures	Problem Solving	Total
	30%	30%	20%	20%	100%
1.1.1	2				2
1.1.2	2				2
1.1.3	2				2
1.1.4			3		3
1.2.1	2				2
1.2.2	2				2
1.2.3	2				2
2.1.1	3				3
2.1.2	2				2
2.1.3		2			2
2.1.4		3			3
2.2.1	2				2
2.2.2		2			2
2.2.3				4	4
2.3.1			3		3
2.3.2				5	5
3.1.1	2				2
3.1.2			3		3
3.1.3		2			2
3.1.4			3		3
3.2.1	2				2
3.2.2	2				2
3.2.3		2			2
3.2.4		2			2
3.2.5		2			2
4.1.1		2			2
4.1.2		2			2
4.1.3		2			2
4.1.4		2			2
4.1.5		2			2
4.1.6				4	4
Total	25	25	12	13	75
Total %	33	33	17	17	100