



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF EDUCATION

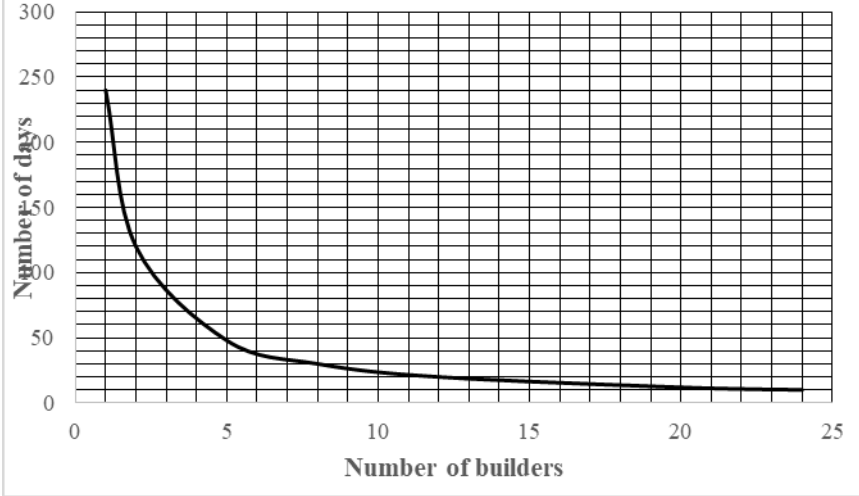
VHEMBE WEST DISTRICT

GRADE 11

**MATHEMATICAL LITERACY
INVESTIGATION MEMORANDUM
FEBRUARY 2024**

Symbol	Explanation
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy
C	Conversion
S	Simplification
E	Explanation
RT/RG/RD	Reading from a table/graph/diagram/map
SF	Correct substitution in a formula
O	Opinion/example/reason/deduction
P	Penalty, e.g. for no units, incorrect rounding off, etc.
R	Rounding off
J	Justification

This memorandum consists of 3 pages including the cover page

QUESTION 1 [24 MARKS]		
QUES	SOLUTION	EXPLANATION
1.1.1	Number of builders is an independent variable and Number of days taken is dependent variable. ✓✓	2A explanation (2)
1.1.2	$A = \frac{240}{20} \checkmark$ $= 12 \checkmark$ $B = \frac{240}{24} \checkmark$ $= 10 \checkmark$	2A answer 2A answer (4)
1.1.3	Number of people taken to build a house 	1A for the title of the graph 1A for labelling 2A for the points (1;240) and (10;24) 2A any two correct points (6)
1.1.4	Inverse proportion ✓✓	2A answer (2)
1.2.1	$P = R17.20 \times 1.15 \checkmark$ $= R19.78 \checkmark$ OR $P = R17.20 + (R17.20 \times 0.15) \checkmark$ $= R17.20 + 2.58$ $= R19.78 \checkmark$ $Q = \frac{R31.95}{1.15} \checkmark$ $= R27.78 \checkmark$	1M multiplying by 1.15 1A correct answer 1M multiplying by 0.15 1A answer (4)
1.2.2	No. ✓She will not pay for the first 16 kl. ✓	1A answer 1O reasoning (2)
1.2.3	Payment for 19.5 kl $= (6.0 \times 0) + (4.5 \times 7.60) + (9 \times 11.61) \checkmark$ $= R0 + R34.20 + R104.49 \checkmark$ $= R138.69 \times 1.15 \checkmark$ $= R159.49 \checkmark$	1SF 1S simplification 1M multiplying by 1.15 1A correct answer (4)

QUESTION 2 [26 MARKS]		
QUES	SOLUTION	EXPLANATION
2.1.1	8 am✓✓	2RG (2)
2.1.2	Distance travelled 20 km – 0 km✓✓ = 20 km✓	1SF 1S simplification 1A unit (3)
2.1.3	1 hour✓✓	2RG (2)
2.1.4	3 clients✓✓	2RG (2)
2.1.5	80 km – 20 km✓✓ = 60 km✓	2A MA 1A answer (3)
2.1.6	The salesman travelled back home✓✓	2O opinion (3)
2.1.7	Average speed = distance ÷ time = 120 km ÷ 2 h✓✓ = 60 km/h✓	1SF substitution 1MA correct values 1A answer (3)
2.2.1	Five minutes to twelve✓✓	2A answer (2)
2.2.2	11h56 – 2h45✓ = 09h11✓	1M subtraction 1A answer (2)
2.2.3	$^{\circ}\text{F} = (1,8 \times 25^{\circ}) + 32^{\circ}$ ✓ = $45^{\circ} + 32^{\circ}$ ✓ = 77° ✓	1SF substitution 1S simplification 1A correct answer (3)
2.2.4	100 m × 100 ✓ = 10 00 cm✓	1M × by 100 1C conversion (2)