Education and Sport Development
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NORTH WEST PROVINCE

NATIONAL SENIOR CERTIFICATE

GRADE 11

MATHEMATICAL LITERACY P1
JUNE EXAMINATION MEMO

2019

MARKS: 75

Symbol	Explanation
M	Method
CA	Continuous accuracy
A	Accuracy
C	Conversion
S	Simplification
RT/RG/RM	Read from Table / Read from graph/ Read from Map
SF	Substitution in formula
O	Opinion/Example / Deduction/conclusion
P	Penalise for example no units / incorrect rounding etc
R	Rounding
J	Justification/ Motivation/ Supply a Reason

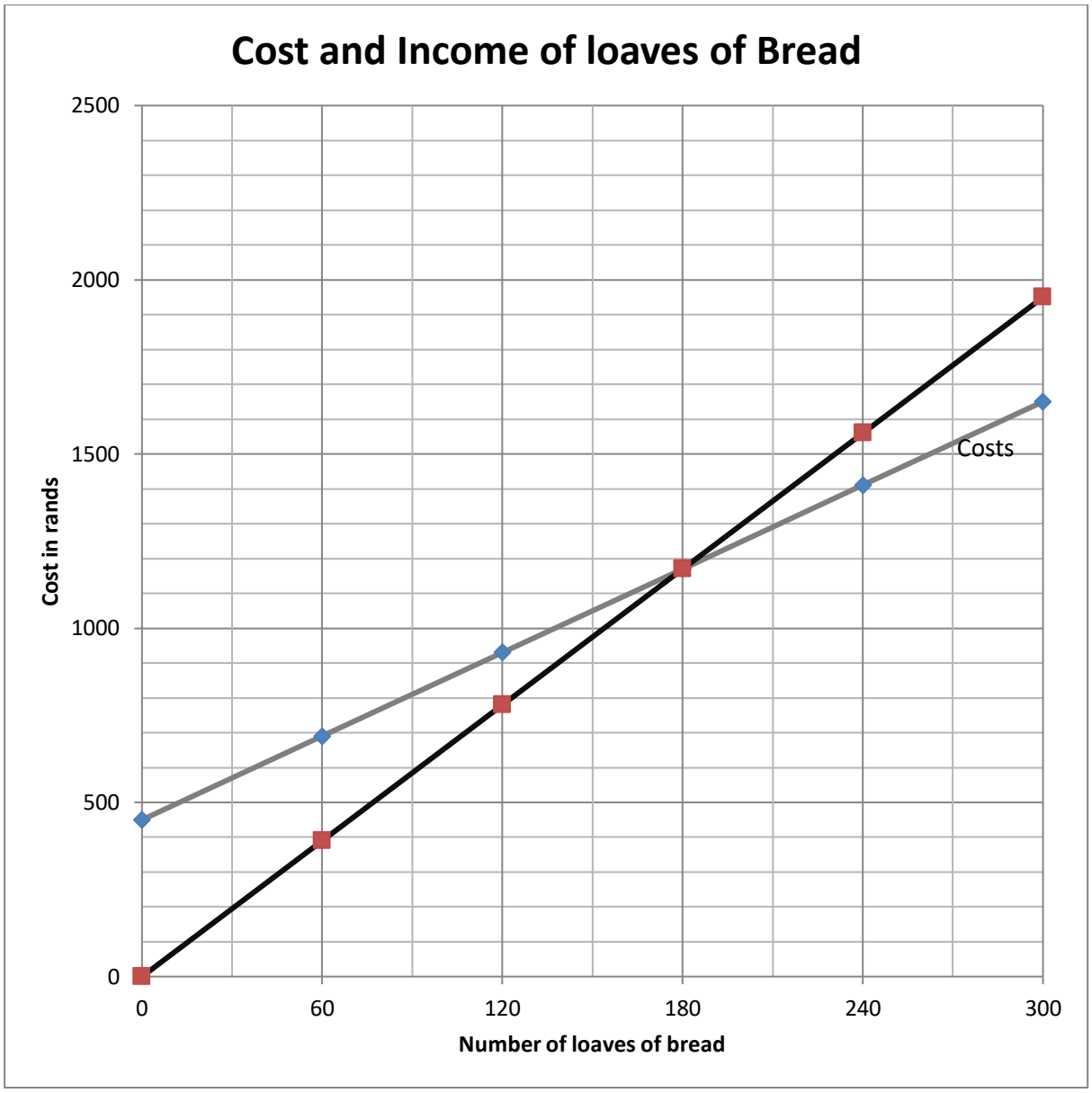
QUESTION 1 [15]			
OUES	SOLUTIONS	EXPLANATIONS	L1-4
1.1.1	Rent ✓ Cell phone contract✓ (2)	2 A	1
1.1.2	R 250 ,00 × 4 = R 1 000, 00✓ R 1 000, 00 + R 600, 00✓ R 1 600,00✓ (3)	1M 1M 1A	2
1.1.3	B = R150, 00 + R 500,00 + R 300,00+ R 120,00 ✓ = R 1 070,00✓ (2)	1M 1A	2
1.1.4	$\frac{1\ 070,00}{1\ 600,00} \times 100$✓ = 66,875%✓ = 67%✓ (3)	1M 1A 1R	3
1.2.1	4:30 – 9:00✓ = 5hours 30minutes✓ (2)	1M 1A	2
12.2	5hours× 60minutes = 300minutes✓ 300minutes + 30minutes✓ = 330minutes✓ (3)	1M 1M 1A	3

QUESTION 2 [19]			
2.1.1	Cost = R450 +(R4×number of loaves) ✓ ✓	2Correct formula (2)	2
2.1.2	Value for A= R450 + (R4 ×300) ✓ = R1 650,00✓ Value for B= R6.50 × R180✓ =R1 170,00✓	1 Substitution 1 Answer 1 Substitution 1 Answer (4)	2
2.1.3	Cost of 50 loaves = R450 + (R4 × 50) ✓ = R650,00✓	1 Substitution 1 Answer (2)	

	Graph: See attached page	1 heading 1 A (0;450) 1 A (0;0) 1 breakeven point 1 labelling both axis 1 labelling both graphs 1A joining the points (7)	2
2.1.5	Coordinates (180✓; R1 170) ✓ It means that both cost and income for baking and selling 180 loaves is the same amount which is R1 170. ✓ ✓	2 coordinates 2 Meaning (4)	2

QUESTION 3 [20]			
3.1.1	Two items ✓✓ (2)	2A	1
3.12	R 499, 00 × $\frac{33}{100}$ ✓ R 164, 00✓ (2)	1M 1M	2
3.1.3	Total including VAT R 768,00 × $\frac{15}{100}$ ✓ = R 115, 20 + R 768,00✓ = R 883,40 ✓ (3)	1Mmultiplication 1Maddition 1Aanswer	2
3.2.1	Cost of water used 6kl = R0, 00 24kl × 6,48✓ = R155, 52✓ 5kl × 16,20 = R81,00✓ R155, 52 +R81,70✓ =R236,52 R236,52 + R80,70✓ + R17,15✓ = R324,37 ✓ (7)	1Multiplication 1Aanswer 1Aanswer 1Maddition 1Madding R80,70 1Madding R17,15 1Aanswer	2
3.2.2	New price = R80,70 × $\frac{15}{100}$ = R 12,01✓ = R80,82 + R12,01✓ = R 92,81✓ (3)	1Mmultiplication 1Maddition 1Aanswer	2
3.3	$1st\ year = (\frac{7,5}{100} \times \text{R}120\ 000,00) + \text{R}\ 120\ 00,00$ ✓		

	= R129 000, 00✓ $2nd\ year = \frac{7,5}{100} \times$ R129 000,00 + R129 000, 00 = R138 675,00 ✓ $3rd\ year = \frac{7,5}{100} \times$ R139 675,00 + R139 675,00 = R149 075,63 ✓ (4)	1Multiplication 1Aanswer 1Aanswer 1Aanswer	3
QUESTION 4 **[15]**			
4.1.1	Radius = $\frac{14}{2}$ ✓ = 7cm✓ (2)	1dividing by 2 1Aanswer	1
4.1.2	$Volume = \pi r^2 \times$ h V= 3,142 × $(7cm)^2 + 24\ cm^2$✓ V = 3694,99 c m^3 ✓ V= 3694.99 c m^3 - 3456 c m^3 ✓ V= 238.99 m^3 ✓ (4)	1Substitution 1Aanswer 1M 1A	3
4.1.3	Volume = $(side)^2 \times$ height = 3456 c m^3 = $(A)^2 \times$ 24cm✓ $(A)^2$ = 3456 c$m^3 \div$ 24cm✓ $(A)^2 = 144\ cm^3$ $(A)^2 = \sqrt{144}$✓ A = 12 ✓ (4)	1S 1M 1M 1A	3
4.2.1	Boipelo nature reserve✓✓ (2)	2A	1
4.2.2	N 12✓, N 14 ✓and N 4✓ (3)	3A	1
4.2.3	Turn into R505✓ and continue until you reach Lichtenburg✓. Turn into R52✓ and join N14✓ and continue until you reach Sannieshof. ✓ ✓ (6)		2


Cost and Income of loaves of Bread
2500
2000
1500
1000
500
0
Cost in rands
0
60
120
180
240
300
Number of loaves of bread
Costs