Province of the
EASTERN CAPE
EDUCATION

NATIONAL SENIOR CERTIFICATE

GRADE 11

NOVEMBER 2014

MATHEMATICAL LITERACY P1 MEMORANDUM

MARKS: **100**

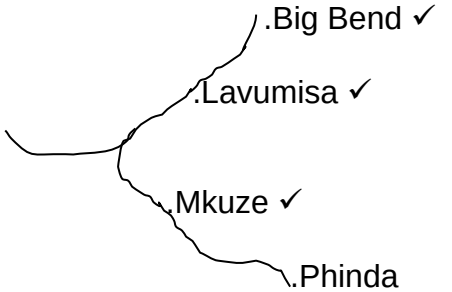
This memorandum consists of 6 pages.

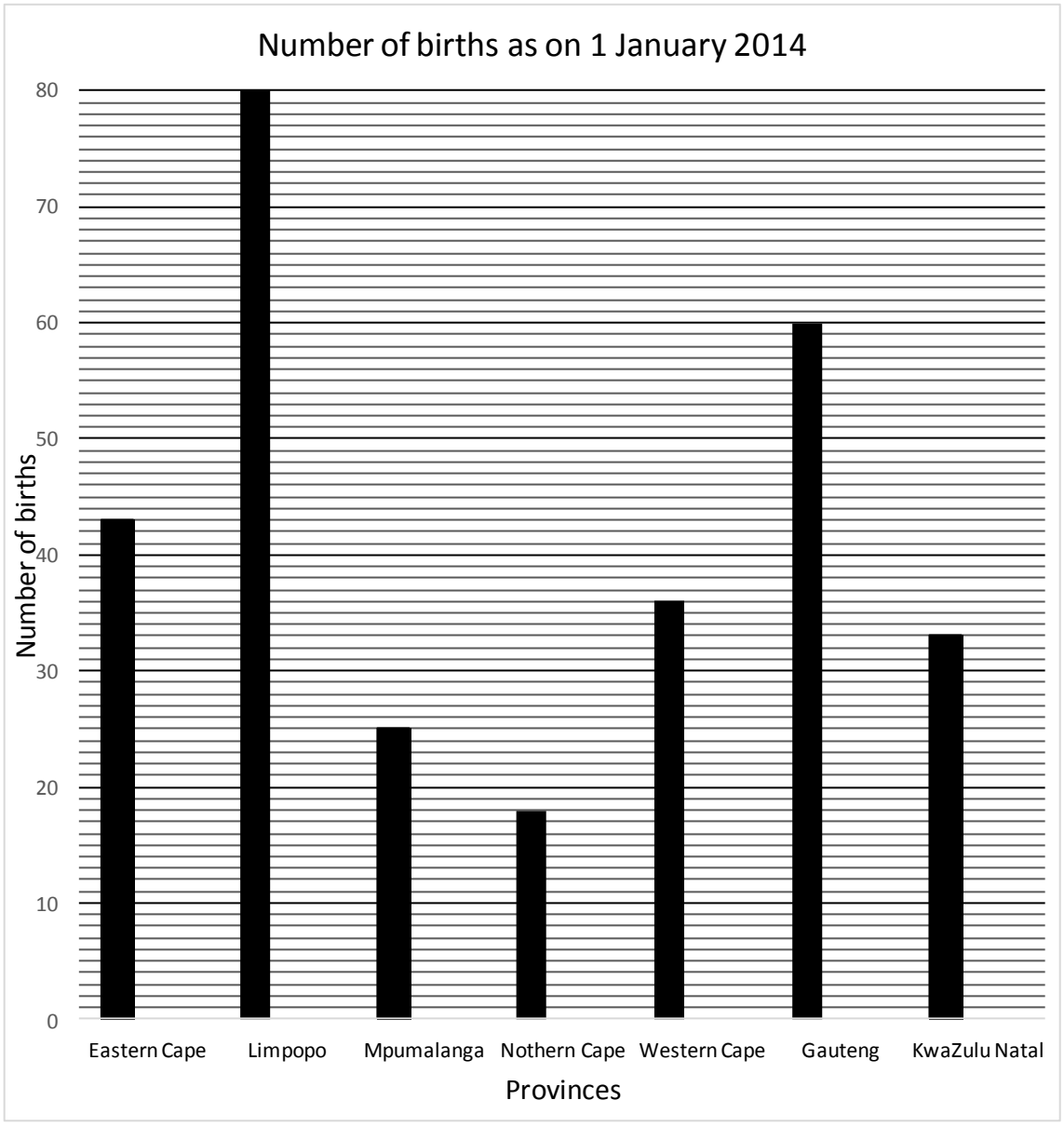
QUESTION 1

Q	SOLUTION	Finance	
1.1.1	R70,17 x 3 + 2 x R2 367,54 + R28,06 x 3 + R28,94 ✓	1M	
	R210,51 + R4 735,08 + R84,18 + R28,94 ✓	1S	
	R5 058,71 ✓	1A	(3)
1.1.2	$\frac{R28,06}{20}$ ✓	1M	
	= R1,40 ✓	1A	(2)
1.1.3	December ✓✓	2RT	(2)
1.1.4	VAT number 8754896368 ✓✓	2RT	(2)
1.1.5	Brush cutter RYOBI 43CC ✓✓	2RT	(2)
1.1.6	Q 000002158 ✓✓	2RT	(2)
		Measurement	
1.1.7	1 000 mℓ = 1 ℓ		
	2 00 mℓ $= x$ ✓	1M	
	$\frac{200\ \text{m}\ell}{1\ 000} = \frac{1\ 000x}{1\ 000}$ $0,2\ \ell \quad = x$ ✓	1A	(2)
1.1.8	12 x 13 ✓	1M	
	= 156 months ✓	1A	(2)
		Data Handling	
1.2.1	School E ✓✓	2A	(2)
1.2.2	School A fees – School B fees		
	R14 000 – R12 000 ✓	1M	
	= R2 000,00 ✓	1 A	(2)
			[21]

QUESTION 2

Q	SOLUTION	Finance	
2.1.1	$\frac{\text{R192 600 x 100}}{114}$ ✓ ✓	2SF 1 A	(3)
	= R168 947,37 ✓ **OR** R192 600 x $\frac{14}{114}$ R23 652,63 ✓ R19 6200 – R23 652,63 ✓ = R168 947,37 ✓		
	OR		
	R192 600: x ✓ = 114% : 100 ✓ x = R168 947,37 ✓		
2.1.2	$\frac{\text{R478, 20}}{36}$ ✓= R13,28 ✓	1D 1A	(2)
2.2.1	Profit = R7 200,00 – R3 339,14 ✓ = R3 860,86 ✓	1SF 1 A	(2)
2.2.2	R350,00 x 4 = R1 400,00 ✓ **OR** 1% of R350 R1 400,00 x 1% ✓ R3,50 x 4 = R14,00 a month ✓ = R14,00	1M 1S 1A	(3)
2.2.3	% increase = $\frac{\text{R380,00 – R360,00}}{\text{R360,00}}$ x 100 ✓ = $\frac{20}{360}$ x 100 ✓ = 5,56 or 5,6% ✓	1SF 1S 1CA	(3)
2.3.1	$\frac{27\%}{365}$ ✓ = $\frac{27}{365 \times 100}$ ✓ = 0,00074 ✓	1D 1 S 1A	(3)
2.3.2	Instalment due = $\frac{\text{R4 529,96 x 127\%}}{12}$ + R21,00 ✓ = R5 753,05 ÷12 + R21,00 ✓ = R479,42 + R21,00 = R500,42 ✓	1SF 1S 1CA	(3)
2.3.3	R6 879 ✓ 379,83 ✓ = R18,1107 ✓ = R18,11	2D 1A	(3)
			[22]

QUESTION 3: MEASUREMENT			
3.1.1	Area = 162 m x 160 m ✓ = 25 920 m^2 ✓	1SF 1A	(2)
3.1.2	Perimeter = 2(160 m +162 m) ✓ = 644 m ✓	1SF 1A	(2)
3.1.3	No. of holes = 324 ÷ 2 – 1 ✓ = 162 – 1 ✓ = 161 holes ✓	1SF 1S 1A	(3)
3.1.4	SA = 2(6,2 m x 3 m) + 2(5,1 x 3 m) – (1,71 m^2 + 4,875 m^2) ✓ = 37,2 m^2 + 30,6 m^2 – 6,585 m^2 ✓ = 61,215 m^2 ✓	1SF 1S 1A	(3)
3.1.5	1 ℓ = 6 m^2 x = 61,215 ✓ 61,215 ÷6 = x x = 10,2025 / 5 ✓ = 2,0405 Therefore 3 (*5 ℓ) tins* of paint. ✓	1M 1M 1A	(3)
3.2	$\frac{115\text{ kg}\ ✓}{(1,832\text{ m})^2\ ✓}$ Penalise if units not written = 34,26 kg/m^2 ✓✓ Accept 114 kg (33,97 kg/m^2)	1CV 1SF 1A 1U	(4)
			[17]
QUESTION 4			
4.1.1	C2 ✓✓	2RM	(2)
4.1.2	Indian Ocean ✓✓	2RM	(2)
4.1.3	Swaziland ✓ and Mozambique ✓	2RM	(2)
4.1.4	6,5 x 2 600 000 =16 900 000 ✓ 16 900 000 ÷100 000 ✓ = 169 km ✓	1M 1C 1A	L3(3)
4.1.5		3RM	L1(3)

4.1.6	Kwazulu-Natal ✓✓	2A	(2)
4.1.7	Qumbu ✓ Mount Frere ✓	2A	(2)
			[16]
QUESTION 5: DATA HANDLING			
5.1.1	Limpopo ✓✓	2RT	(2)
5.1.2	Gauteng : Total number of babies 60 : 320 ✓✓ 1 : 5.333… ✓ 1: 5 ✓	 2CV 1A 1R	(4)
5.1.3			
	1 Mark per bar strictly accurate (4) (only the missing ones in the paper)		(4)

5.2.1	$\frac{108,91}{20}$ ✓ ✓ = 5,45B✓	1 add 1M 1A	(3)
5.2.2	Median = $\frac{R2,76 + R2,91)}{2}$ ✓ = $(\frac{R5,67}{2}$ ✓ $)$ = R2,84 ✓	1M 1S 1A	(3)
5.2.3	Modal value = R6,50 ✓✓	2A	(2)
5.2.4	$\frac{2}{20}$ ✓ $\frac{1}{10}$ ✓	1M 1A	(2)
5.2.5	Range = R3,36 – R2,16 ✓ = R1,20 ✓	2A	(2)
5.2.6	R1,39 ✓✓	2RB	(2)
			[24]
		TOTAL:	**100**