Province of the
EASTERN CAPE
EDUCATION

INTERMEDIATE PHASE

GRADE 6

NOVEMBER 2017

**MATHEMATICS
MARKING GUIDELINE**
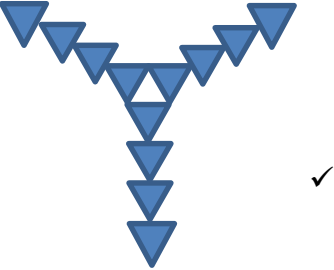
MARKS: 75

GENERAL MARKING NOTES

1.   Give full marks for answers only, unless stated otherwise.

2.   Accept any alternative, correct solutions that are not included in the memorandum.

Questions		Expected answers	Clarification	Marks
1.	1.1	C ✓		1
	1.2	A ✓		1
	1.3	D ✓		1
	1.4	B ✓		1
	1.5	A ✓		1
	1.6	D ✓		1
	1.7	D ✓		1
	1.8	C ✓		1
	1.9	A ✓		1
	1.10	B ✓		1

2.	4 litres for 20 km 180 km = 20 km x 9 ✓ Therefore $4\,\ell \times 9 = 36\,\ell$ ✓ 36 litres will be used to drive 180 km. ✓	Accept any other correct method.	3
3.	764 000✓		1
4.	$\dfrac{1}{4}; \dfrac{2}{5}; \dfrac{1}{2}; \dfrac{2}{3}$ ✓✓		2
5.	His wife received $\frac{1}{2}$ of 124 cows $= \frac{1}{2}$ x 124 $= 62$ cows ✓ His son received $\frac{1}{4}$ of 124 $= \frac{1}{4}$ x 124 $= 31$ cows ✓ His daughter received $124 - (62 + 31)$ $= 124 - 93$ $= 31\ cows$ ✓	Accept any other correct method.	3
6.	6.1 ✓		1
	6.2	Add 3 small triangles to each step ✓✓ or + 3		2
	6.3	6.3.1	30 ✓		1
		6.3.2	100 ✓		1
7.	567,38 – 197,2 567,38 – 197,20 = 370,18 ✓	Accept any other correct method.	1

8.	8.1	456 954 + 364 637 = 821 591 ✓✓ **OR** (400 000 + 300 000) + (50 000 + 60 000) + (6 000 + 4 000) + (900 + 600) + (50 + 30) + (4 + 7) ✓ = 700 000 + 110 000 + 10 000 + 1 500 + 80 + 11 = 821 591 ✓	1 mark for the answer and 1 mark for the ordering of the place values correctly. Accept any other correct method.	2

	8.2	639 742
		  − 520 834 ✓
		  = 118 908 ✓
		
		OR
		(600 000 − 500 000) + (30 000 − 20 000) +
		(8 000 − 0 000) + (1 700 − 800) + (30 − 30) + (12 − 4)
		= 100 000 + 10 000 + 8 000 + 900 + 00 + 8
		= 118 908
			1 mark for the answer and 1 mark for the ordering of the place values correctly. Accept any other correct method.	2

	8.3	2 359
		  x 275
		   11 795 ✓
		 165 130
		+ 471 800 ✓
		 648 725 ✓
		
		OR
		
			Any other correct method is acceptable.	3

	8.4	$3\,375 \div 125$ $.\ .\,27$ $\underline{125\,}\overline{)3\,375}$ $2\,50$ 875 $\underline{875}$ $.\,.\,.$ $3\,375 \div 125 = 27$ ✓✓✓ **OR** $3\,375 \div 125 =$ $3\,375$ $\underline{-\,1\,250}$ 125×10 $2\,125$ $\underline{-\,1\,250}$ 125×10 875 $\underline{-\,875}$ 125×7 $. . .$ $3\,375 \div 125 = 27$	Any other correct method is acceptable.	3
	8.5	$3\frac{3}{4} + 5\frac{1}{2} - 3\frac{3}{8}$ $= (3 + 5 - 3)$✓ $+ (\frac{3}{4} + \frac{1}{2} - \frac{3}{8})$ ✓ $= 5 + (\frac{3\times2}{4\times2} + \frac{1\times4}{2\times4} - \frac{3}{8})$ $= 5 + (\frac{6}{8} + \frac{4}{8} - \frac{3}{8})$ $= 5 + (\frac{10}{8} - \frac{3}{8})$ $= 5\frac{7}{8}$ ✓ **OR** $3\frac{3}{4} + 5\frac{1}{2} - 3\frac{3}{8}$ $= 5 + (\frac{15}{4} + \frac{11}{2} - \frac{27}{8})$ ✓ $= (\frac{15 \times 2}{4 \times 2} + \frac{11 \times 4}{2 \times 4} - \frac{27}{8})$ $= \frac{30}{8} + \frac{44}{8} - \frac{27}{8}$ ✓ $= \frac{74}{8} - \frac{27}{8}$ $= \frac{47}{8}$ $= 5\frac{7}{8}$ ✓	1 mark for the answer and 2 marks for the calculation. Accept any other correct method.	3

	8.6	$214 \div 2 \times (14 - 9)$ 107×5 ✓ $= 535$ ✓		2
9.	9.1	$10\,k\ell$ ✓		1
	9.2	9.2.1	$\dfrac{100\,\ell}{10\,\ell}$ ✓ $= 10\ times$ ✓		2
		9.2.2	$100\,\ell \times 25$ ✓ $= 2\,500\,\ell$ taken from the tank ✓		2
10.	$\dfrac{5}{8}$ ✓ $\times 40$ ✓ $= 5 \times 5$ $= 25$ girls ✓	1 mark: (5 + 3 =8) 1 mark: method 1 mark: Answer	3
11.	24 ✓		1
12.	2 000 ✓	1 mark: Answer	1
13.	5 ✓	1 mark: Answer	1
14.	14.1	Square-based pyramid ✓	1 mark: Answer	1
	14.2	5 ✓	1 mark: Answer	1
	14.3	5 ✓	1 mark: Answer	1
15.	15.1	60% ✓	1 mark: Answer	1
	15.2	$\dfrac{3}{4}$ ✓	1 mark: Answer	1
	15.3	R75 – R60 = R15 discount ✓ $\dfrac{R15 \div 15}{R75 \div 15} \times 100$ $\dfrac{1}{5} \times 100 = 20\%$ ✓	Accept any other correct method.	2
16.	16.1	6 triangles ✓	1 mark: Answer	1
	16.2	Angle 1: Acute angle ✓	1 mark: Answer	1

17.	4 tricycles and 4 bicycles ✓✓ **OR** 2 tricycles and 7 bicycles **OR** 6 tricycles and 1 bicycle	2 marks: Answer	2
18.	18.1	08:15 – 01: 15 = 7 hours ✓	1 mark: Answer	1
	18.2	03: 50 ✓		1
19.	19.1	12 units ✓		1
	19.2			2
20.	F7; F8; E8 ✓	1 mark: Any 2 correct cells	1
21.	21.1	$\frac{3}{4} \times 240 = 180$ ✓ Awonke has 120 cans so to get 180 he needs 60 more. He must share with Chris. **OR** Combine Lwazi, Vusi and Dannie's cans ✓		2
	21.2	$\frac{60}{240} \times 100$ ✓ $= 25\%$ ✓		2
	21.3	$\frac{30}{240}$ ✓ $= \frac{1}{8}$ ✓		2
22.	$\frac{1}{6}$ ✓		1
		TOTAL:	**75**