



Province of the
EASTERN CAPE
EDUCATION

INTERMEDIATE PHASE

GRADE 6

NOVEMBER 2011


**MATHEMATICS
MARKING GUIDELINE**

MARKS: 50

This memorandum consists of 4 pages.

Questions	Expected Answer	Marks
1.	Two million three hundred and forty six thousand four hundred and seventy five \checkmark	(1)
2.	1,53; 1,5; 1,35 1,13, 0,9, 0,89; \checkmark	(1)
3.	$\begin{array}{r} 10\ 562 \\ - 3\ 789 \\ \hline 6\ 773 \end{array} \checkmark$ <p>1 mark for correct interpretation of the problem 1 mark for the correct answer</p>	(2)
4.	$\begin{array}{r} 2\ 517\ 829 \\ + 6\ 436\ 427 \\ \hline 8\ 954\ 256 \end{array} \checkmark$	(1)
5.	5.1 $527\ 650 \checkmark$	(1)
	5.2 $528\ 000 \checkmark$	(1)
6.	$10 \checkmark$	(1)
7.	$2036 \checkmark$	(1)
8.	$2\ l = 2000\ ml$ $2000\ ml = 10\ cups \checkmark$ 1 mark for correct conversion of l to ml 200 Each will get $2\ cups \checkmark$ 1 mark for the correct answer	(2)
9.	$(1\ hr + 30\ mins) \times 7$ or $90\ min \times 7$ $= 7\ hrs + 210\ mins \checkmark$ $= 630\ mins \checkmark$ 1 mark for correct conversion $7\ hrs + 3\ hrs + 30\ mins$ $= 10\ hrs\ 30\ mins \checkmark$ 1 mark for the correct answer $10\ hrs\ 30\ mins \checkmark$ or any other correct method	(2)
10.	$354\ g = \frac{354}{1000}\ kg$ $= 0,354\ kg \checkmark$	
11.	$\frac{37}{50} \times 100$ $= 74\% \checkmark$	(1)
12.	$5 \checkmark$	(1)

13.	13.1	$6\frac{1}{4} + 4\frac{1}{2} - \frac{4}{12}$ $= 10 + \frac{1}{4} + \frac{1}{2} - \frac{1}{3}$ $= 10 + \frac{3}{12} + \frac{2}{12} - \frac{4}{12}$ $= 10 + \frac{5}{12}$ $= 10\frac{5}{12}$	<p>1 mark for correct conversion</p> <p>1 mark for correct answer</p>	(2)
	13.2	$32 - (3 \times 6) + 48 \div 6$ $= 32 - 18 + 8$ $= 32 - 26$ $= 6$	<p>1 mark for correct manipulation</p> <p>1 mark for correct answer</p>	(2)
14.	2, 13; 17; 53		1 mark for all numbers, no mark if one is wrong or missing	(1)
15.	$(7 \times 1\,000\,000) + (2 \times 100\,000) + (3 \times 10\,000) + (4 \times 1\,000) + (5 \times 100) + (0 \times 10) + (9 \times 1)$			(1)
16.	$\begin{array}{r} 3\,697 \\ \times \quad 78 \\ \hline 29576 \\ 258790 \\ \hline 288366 \end{array}$		<p>1 mark for correct multiplication</p> <p>1 mark for correct answer</p>	(2)
	17.	$\frac{35}{100} = \frac{7}{20}$		(1)
18.	60 000			(2)
19.	19.1	$6 + 6 \times \frac{1}{2}$ squares $= 6 + 3$ $= 9$ squares		(1)
	19.2	140 cubes any method is acceptable (literal counting one by one) or using approaches such as counting cubes per layer i.e. each layer has 35 cubes and since there are 4 layers thus the total is 140		(1)
	19.3	Perimeter = 5cm+7cm+5cm+7cm =24cm		(1)
20.	20.1			(1)
	20.2	There can be different observations, one of them could be: There is always 1 marble at the centre. Then in each stage she adds 1 more marble on the 3 sides to form a T.		(1)

	20.3	$(1+1+1)+1=4 = 3 \times 1 + 1$ $(2+2+2)+1=7 = 3 \times 2 + 1$ $(3+3+3)+1=10 = 3 \times 3 + 1$ $(4+4+4)+1=13 = 3 \times 4 + 1$ So the general rule is $3 \times \text{pattern number} + 1$ or $\sqrt{\sqrt{\quad}}$ Any other method is acceptable	(2)
	20.4	$3 \times 25 + 1 = 76\sqrt{\quad}$	(1)
21.		$a = 11\sqrt{\quad}$ $b = 133\sqrt{\quad}$	(2)
22.			(1)
23.	23.1	Turn or Rotation $\sqrt{\quad}$	(1)
	23.2	Slide or Translation $\sqrt{\quad}$	(1)
24.	24.1	C $\sqrt{\quad}$	(1)
	24.2	A is a pyramid and B is a prism $\sqrt{\quad}$	(1)
	24.3	Cube $\sqrt{\quad}$ no mark if gives letter D	(1)
25.	25.1	7 $\sqrt{\quad}$	(1)
	25.2	3; 4; 4; 5; 5; 5; 6; 6; 6; <u>6</u> ; 7; 7; 7; 7; 7; 8; 8; 9; 10 So 6 is the median	(1)
26.	26.1	$\sqrt[3]{10}$	(1)
	26.2	6:3 $= 2:1\sqrt{\quad}$ Give a full mark even if not simplified	(1)
	26.3	impossible	(1)
27.	27.1	$50+40+35+15+20=160$	(1)
	27.2	Monday	(1)
	27.3	Wednesday	(1)
TOTAL:			50