

2014

Grade 8 Class Assignment

Examiner: Miss Goldstone

Moderators: Mrs Smidt, Mrs Campher and Miss Goring

Instructions:

Write neatly and legibly.

This is an open book assignment therefore you may use your books and textbooks.

You **MAY NOT** use a calculator

QUESTION 1:

1.1 Redraw the square below in your folio paper and fill in the missing squares by multiplying each number in the first column by each number in the top row. The first one is done for you. (7½)

<b>X</b>	4	7	12	8
3	12			
5				
9				
11				

1.2 Calculate the answer to  $2890 \times 102$  using the column method. Some of the numbers leading to your answer are filled in for you. Complete the answer on your folio paper. (6½)

	Th	H	T	U
	2	8	9	0
X		1	0	2

	5	7	8	0
	0	0	0	0
2	9	8	9	1
	9	7	6	

1.3 Calculate the answer to  $2556 \div 12$

	2
12	$\overline{)2556}$
	- 4
	5
	1
	6
	0

(4)

**QUESTION 2:**

Complete the following:

Find the multiples of the following up to 6 times the number:

2: Eg M<sub>2</sub>: 2 4 6 8 10 12

1.1 M<sub>4</sub>

1.2 M<sub>7</sub>

1.3 M<sub>9</sub>

(9)

**QUESTION 3 :**

Eg: Determine the LCM of 6, 8 and 12.

Answer:

$$M_{12} = \{ 12, 24 \}$$

$$M_8 = \{ 8, 16, 24 \}$$

$$M_6 = \{ 6, 12, 18, 24 \}$$

Therefore the LCM = 24.

Calculate the following as shown in the example above.

4.1 The LCM of 5 and 6.

(3)

4.2 The LCM of 2, 3 and 5.

(4)

**QUESTION 4 :**

List all the factors [ Remember 'list' implies brackets and semi- colons]

$$\text{Eg : } F_4 = \{ 1, 2, 4 \}$$

5.1 F<sub>10</sub>

5.2 F<sub>60</sub>

(8)

**QUESTION 5:**

6.1 Use the division ladder method to find the prime factors of 1521.

(3)

**QUESTION 6:**

Simplify the following ratios:

Eg 1: The ratio 4 : 8 – Divide both numbers by four (HCF) and it simplifies to 1:2.

Eg 2: The ratio 3: 6 : 9 – Divide all three numbers by 3 and the ratio simplifies to 1: 2: 3.

Simplify:

7.1 12 : 16

7.2 12 : 30 : 18

7.3 4 : 8: 16

(5)

**Total: 50**