NUMBER THEORY WORKSHEET BJC REVIEW

NAME:_____ DATE:_____

ANSWER ALL QUESTIONS

SECTION A- Review

1. **Solve**

(a) 21,433 + 7,086 + 12

Answer=_____

(b) 8,203 - 4,136

Answer=_____

(c) 4,056 x 3

Answer=_____

(d) 7025 ÷ 5

Answer=_____

2. **From the set of numbers {1,2,3,4,5,6,7,8,9,10}, write down:**

(i) The smallest prime number_____

(ii) The smallest multiple of 2_____

(iii) The largest factor of 12_____

(iv) The number that is neither prime nor composite_____

3. A Mathematics lesson started at 9:05. It ended at 10:18. How long did the lesson last?

Answer= ___ hr ___ min

4. Solve using PEMDAS

(a) 7 + 4 x 2

Answer=_____

(c) 63 ÷ 9 x 7 + 2

Answer=_____

(b) $3 + (9-7)^2 \times 5 - 2$

Answer=_____

5. Complete each number sequence by filling in the next two numbers in the sequence:

(a) 8, 16, 24, 32, _____, _____

(b) 2, 3, 5, 8, 13, _____, _____

(c) 1, 4, 9, 16, _____, _____

SECTION B-PRIME FACTORISATION

1. To use PRIME FACTORISATION to calculate the HCF of the following sets of numbers:

(a) 12 and 16 (b) 24, 30 and 48

Ans=_____ Ans=_____

2. To use PRIME FACTORISATION to calculate the LCM of the following sets of numbers:

(b) 6 and 8 (b) 30 and 45

Ans=_____ Ans=_____

3. The prime factors of two numbers are given below:

First Number:_____=2 x 2 x 2 x 3

Second Number:_____=2 x 2 x 3 x 3

(a) What are the two numbers? (Write your answers of the lines above)

(b) What is the (i) HCF_____ of the two numbers?

(ii) LCM_____

4. (a) Express 144 as a product of its prime factors.

144 = ____ x ____ x ____ x ____ x ____ x _____

(b) Hence, find $\sqrt{144}$

Answer = _____

5. (a) Express 1000 as a product of its prime factors.

1000 = _____ x ____ x ____ x ____ x ____ x ____

(b) Hence, find $\sqrt[3]{1000}$

Answer = _____