B.J.C. NUMBER THEORY REVIEW

Name: _____ Date: _____

INSTRUCTIONS: Answer ALL questions in the spaces provided.

1. Write the smallest number you can make using all four digits given below.

8; 7; 9; 6

Answer: _____

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

(a) factors of 6 _____

(b) square numbers _____

(c) even numbers _____

(d) multiples of 3 _____

(e) cube numbers _____

3 The prime factorization of a certain number is 2 x 2 x 3 x 3 x 5.

(a) Express this in index form.

Answer: _____

(b) What does this number represent?

Answer: _____

4. Select the number that is NOT a square number.

49 **16** **30** **9**

5. Select the number that is NOT a prime number.

3 **7** **9** **11**

6. Given that

90 = 2 x 3 x 3 x 5

54 = 2 x 3 x 3 x 3

Find the Highest Common Factor (H.C.F.) of the two numbers.

Answer: _____

LIVEWORKSHEETS

7. Evaluate (a) $3^3 + 1$

Answer: _____

(b) State whether your answer to (a) is a prime number of a composite number.

Answer: _____

8. (a) Express 400 as a product of its prime factors.

Answer: _____

(b) Calculate $\sqrt{400}$

Answer: _____

9. Find the L.C.M. of 8 and 12.

Answer: _____

10. Evaluate:

$$3 + 2 \times 6 - 7$$

Answer: _____

LIVEWORKSHEETS