Unit 1- Prime Time- Test Review #1 Mrs. Billinghurst (Turquoise)

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Group\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**STUDY GUIDE for Test on Friday, October 6th, 2016:**

-Factors

-Multiples

-Prime Numbers

-Composite Numbers

-Square Numbers

-Common Multiples

-Common Factors

-Least Common Multiple (LCM)

-Whole Numbers

-Greatest Common Factor (GCF)

-Distributive Property

-Exponents

-Order of Operations

1.A whole number is: NOT a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. Write next to each number whether it is prime or composite. Then, list its factors.

|  |  |  |
| --- | --- | --- |
| **Number** | **Prime or Composite?** | **Factors** |
| 1. 14
 |  |  |
| 1. 33
 |  |  |
| 1. 23
 |  |  |
| 1. 56
 |  |  |

3. Name the proper factors of the following numbers.

|  |  |
| --- | --- |
| **Number** | **Proper Factors** |
| 1. 17
 |  |
| 1. 16
 |  |
| 1. 25
 |  |
| 1. 24
 |  |

4. A manager turns on the restaurant’s two neon signs at the same time. Both signs blink as they are turned on. One sign blinks every 20 seconds and the other blinks every 15 seconds. In how many seconds will they blink together again?

5. The school has 72 pencils and 54 erasers that they are putting into boxes. What is the greatest number of boxes there could be if there are the same amount of pencils and erasers in each box?

6. Find the least common multiple (LCM) of the following pairs:

a) 24 and 36

b) 20 and 25

c) 42 and 14

7. Find the greatest common factor (GCF) of the following pairs:

a) 18 and 30

b) 49 and 14

c) 32 and 64

A. Write the prime factorization of the following numbers:

Unit 1- Prime Time- Test Review #2 Mrs. Billinghurst (Turquoise)

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Group\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 *(in BOTH expanded & exponential forms)*

1) 36

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Expanded form Exponential form

2) 165

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Expanded form Exponential form

3) 292

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Expanded form Exponential form

B. Identify which form the expression is of the distributive property, write the other form and show that they are equivalent for the following problems:

1) Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2(6+5) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 4(8)+4(3) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C. Use the order of operations to simplify the following expressions:

1)  2) 

D. *Write an expression to solve the word problem and solve the problem:*

Ms. Barbalaco is planning a class trip to Six Flags Frightfest. It costs $14 per student. She is going to bring 12 students from one class and 16 from another class. What is the total cost of the trip for the Ms. Barbalaco for bringing all the students?