

Name: \_\_\_\_\_

## Number Theory Review

Classify each number as prime or composite. Example: 2 = prime

1. 32 = \_\_\_\_\_ 2. 47 = \_\_\_\_\_ 3. 55 = \_\_\_\_\_

If the first number is divisible by the second number write yes.

4. 345 by 3 \_\_\_\_\_ 5. 734 by 2 \_\_\_\_\_ 6. 750 by 5 \_\_\_\_\_

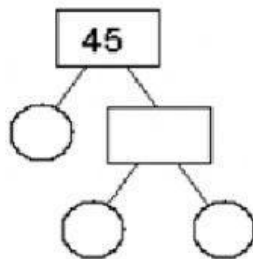
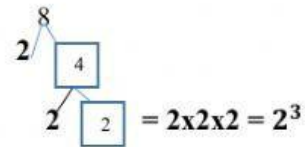
List all of the factors of each number. Example 33 = 1, 3, 11, 33

7. 32 = \_\_\_\_\_ 8. 16 = \_\_\_\_\_ 9. 24 = \_\_\_\_\_

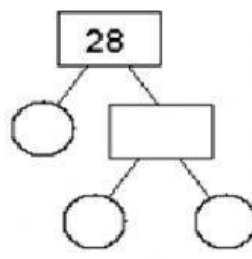
List 5 multiples of the following. (4: 4, 8, 12, 16, 20)

10. 8: \_\_\_\_\_ [11] 3: \_\_\_\_\_

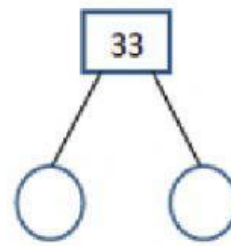
Find the prime factorization of each number. Use a factor tree. Example



\_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_



\_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_



$33 = \_\_\_ \times \_\_\_$

Find the greatest common factor of each set of numbers. **28** = 1, 2, 4, 7, 14, 28 and **44** = 1, 2, 4, 11, 22, 44 = GCF = 4

13. 4 = \_\_\_\_\_ 14. 6 \_\_\_\_\_ 15. 3 \_\_\_\_\_

14 \_\_\_\_\_ 28 \_\_\_\_\_ 10 \_\_\_\_\_ 39 \_\_\_\_\_

GCF = \_\_\_\_\_ GCF = \_\_\_\_\_ GCF = \_\_\_\_\_

Find the least common multiple. **3** = 3, 6, 9, 12, 15, 18 and **5** = 5, 10, 15, 20 = LCM = 15

16. 4 \_\_\_\_\_ 17. 5 \_\_\_\_\_ 18. 4 \_\_\_\_\_

8 \_\_\_\_\_ 10 \_\_\_\_\_ 12 \_\_\_\_\_

LCM = \_\_\_\_\_ LCM = \_\_\_\_\_ LCM = \_\_\_\_\_