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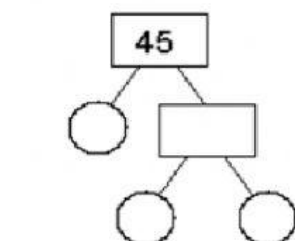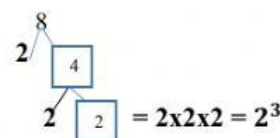
List all of the factors of each number. Example 33 = 1, 3, 11, 33

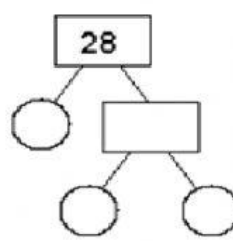7. 32 = _____   8. 16 = _____   9. 24 = _____

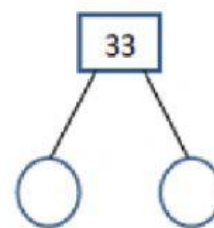List 5 multiples of the following. (4: 4, 8, 12, 16, 20)

10. 8: ____ ____ ____ ____ _____   [11] 3: ____ ____ ____ ____ _____

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

$$8$$
$$2 \quad 4$$
$$2 \quad 2 = 2x2x2 = 2^3$$

_____X ____X _____   ____ X _____X _____   33 = ___ x ___

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 = _____