**Greatest Common Factor Notes**

Use the prime factorization of two numbers to find the greatest common factor.

1. Use a factor tree to write the prime factorization of the first number.
2. Use a factor tree to write the prime factorization of the second number.
3. List the common prime factors of the two numbers.
4. Multiply the common prime factors to get the GCF of the two numbers.

**Ex 1:** Find the GCF of 16 and 28.

16 = 2·2·2·2 28 = 2·2·7

Common Prime Factors = 2·2

**GCF = 4**

1. Find the GCF of 14 and 21.
2. Find the GCF of 12 and 18.
3. Find the GCF of 30 and 75.

**Greatest Common Factor Notes**  Page 2

Use Venn diagrams to find the greatest common factor of two numbers.

1. List the prime factorization of each number.
2. Write the common prime factors in the center of the Venn diagram.
3. Multiply the common prime factors to get the GCF.



1. Find the GCF of 15 and 45.
2. Find the GCF of 56 and 40.