

## *Notes on*

### *Finding Greatest Common Factor*

**Factors:** Numbers that multiply together to form another number. In other words, factors go into a given number evenly with no remainder. For example, factors of 6 are 1, 2, 3, and 6 since  $1 \cdot 6 = 6$  and  $2 \cdot 3 = 6$ .

**Greatest Common Factor (GCF for short):** The largest number that is a common factor of 2 or more numbers.

**To find GCF** for a set of numbers, simply make a list of all of the factors of the given numbers and then choose the largest one that they have in common.

**For example**, let's find the GCF of 6 and 10. The factors of 6 are 1, 2, 3, and 6. The factors of 10 are 1, 2, 5, and 10. The common factors are 1 and 2. The GCF is 2 since  $2 > 1$ .

**For one more example**, let's find the GCF of 25 and 36. The factors of 25 are 1, 5, and 25. The factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18, and 36. The only factor they have in common is 1. So, the GCF is 1.