

# GREATEST COMMON FACTOR

Common factors are numbers that you can multiply to produce another number. The numbers should divide exactly into two or more numbers.

## Common Factors Example

The factors of 6 are 2 and 3:  $2 \cdot 3 = 6$

The factors of 12 are 2, 3, 4, and 6:  $3 \cdot 4 = 12$   
 $2 \cdot 6 = 12$

The **greatest common factor** (GCF) is the largest number that is a factor of two or more numbers.

## GCF Example

**Factors of 15:** 1, 3, 5, 15

**Factors of 35:** 1, 5, 7, 35

Because 5 is the largest factor of both 15 and 35, 5 is the GCF.

There are two steps to follow in order to find the GCF of two numbers:

### Step 1

List the factors of each number.

**15:** 1, 3, 5, 15

**30:** 1, 2, 3, 5, 6, 10, 15, 30

### Step 2

Mark all common factors.

**15:** 1, 3, 5, 15

**30:** 1, 2, 3, 5, 6, 10, 15, 30

The largest factor that 15 and 30 share is 15, which makes 15 the GCF in this case.

