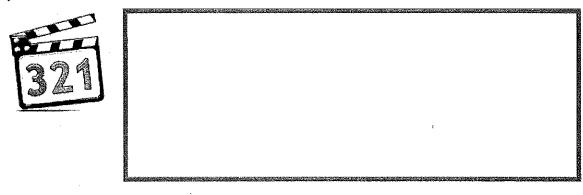# Factoring:

Factoring means to "undo" what has been **multiplied** and/or **distributed!**

Common Factors:

When two integers are multiplied together, the answer is called a **product.**

The **integers that were multiplied together** are called the **factors** of the product.

GCF:

The **greatest common factor** of two (or more) integers is the **largest integer** that is a **factor of both (or all) numbers.**

Find the GCF for the following shown below:

Integers:	Monomials:
Find the GCF of 18, 24, & 36.	Find the GCF of $12x^3$, $30x^2$, and $42x$.

Factoring Expressions using the GCF:

Factor each expression using the GCF:

1] $3a + 6$	2] $8x^2 - 12y + 20$
3] $4mn - 10m$	4] $8a^3b^2 + 16a^2b^2 - 4ab$

5) $5b^2c + 15bc + 25\,bc^2 - 15bc =$

6) If the area of the rectangle is represented as $3w^2 + 5w$, where w is the width of the rectangle. What is the length of the rectangle in terms of w?

$$3w^2 + 5w$$

w