**What does it mean to "factor?"**

Take an addition or subtraction problem and write it as an **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** multiplication problem.

**How have I already seen “factoring?”**

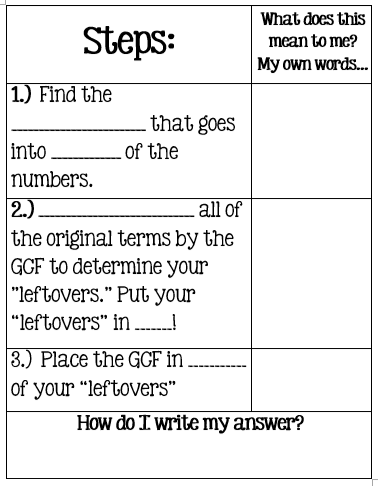
When \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ polynomials! Factoring is just the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ direction.

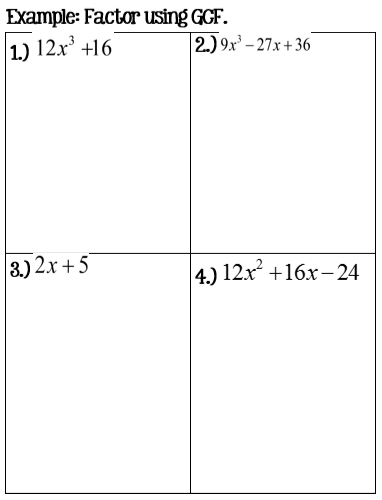
**Example:** Multiply

2(x – 3)

**Factoring using GCF:**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** start by taking check for a GCF \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!





Factoring Quadratic Trinomials where A = 1

To factor, ask yourself...

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Don't forget to ALWAYS start by looking for a GCF!**

Write your factors as:

(\_\_\_\_\_\_\_\_)(\_\_\_\_\_\_\_)

|  |  |
| --- | --- |
| Split the quadratic in \_\_\_\_\_\_\_ and place at the \_\_\_\_\_\_\_\_\_\_ of each ( ). | Place your two numbers (with signs) in the \_\_\_\_\_\_\_\_\_\_\_\_ of  each ( ). |

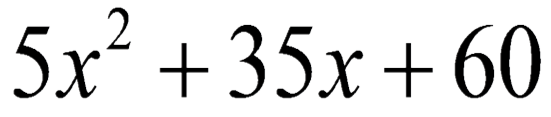
There are \_\_\_\_\_\_\_\_\_ possible sign combinations for these type of trinomials.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Multiply to a (\_) and Add to a (\_) | Multiply to a (\_) and Add to a (\_) | Multiply to a (\_) and Add to a (\_) | Multiply to a (\_) and Add to a (\_) |
| Signs? | Signs? | Signs? | Signs? |

|  |  |
| --- | --- |
| **Examples: Factor** | |
|  |  |
|  |  |

Putting it all together!

**Example: Factor**



**Step # 1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Step # 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**