**2 more ways to factor!**

\*\_\_\_\_\_\_\_\_\_\_\_\_

\*Difference of Two Squares (\_\_\_\_\_\_\_\_\_\_\_)

Remember to always start by checking for a \_\_\_\_\_\_\_\_\_\_\_\_ of the ENTIRE problem first!

We use A ≠ 1 when you have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_ whose leading coefficient is \_\_\_\_ 1.

How to factor using A ≠ 1:

|  |  |
| --- | --- |
| 1.) Multiply \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 2.) Determine what 2 numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to "ac" that \_\_\_\_\_\_\_\_\_\_\_ to "b" |
| 3.) \_\_\_\_\_\_\_\_\_\_\_\_ "b" as those 2 numbers (include the variable). Bring down the original \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ terms.You should now have 4 terms! | 4.) Factor by grouping.* The second GCF should be the \_\_\_\_\_\_\_\_\_\_\_\_\_ sign as the 3rd term.
* You must take out a second GCF, which may end of being a \_\_\_ or \_\_\_.
* Your “leftovers should be \_\_\_\_\_\_\_\_\_\_\_\_\_\_!
 |

\*Write your factors as (\_\_\_\_\_\_\_\_)(\_\_\_\_\_\_\_\_\_)

**Example: Factor using A** $\ne $ **1.**

|  |  |
| --- | --- |
|  |  |

We use DOTS when you have...

\*\_\_\_\_\_\_ Terms

\*1 \_\_\_\_\_\_\_\_ Sign

\*Coefficients and Constants are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\*Variables have \_\_\_\_\_\_\_\_\_\_\_\_ exponents

To factor variables, \_\_\_\_\_\_\_ the exponent by \_\_\_\_\_

**How to factor using DOTS:**

How to factor using DOTS:

1.) Take the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of each term.

\*Do NOT include the \_\_\_\_\_\_\_\_\_\_\_ sign!

**Write your factors as:**

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

|  |  |
| --- | --- |
| **The square root of the positive term goes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** | **The square root of the term behind the minus sign goes in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.** |

**Example: Factoring using DOTS.**

|  |  |
| --- | --- |
|  |  |
| **What do you think about…** |