# GCF Factoring

**Greatest Common Factor**: The largest number that divides evenly into a set of numbers.

When dealing with variables, it is the lowest degree of a variable common to every term.

Examples: Factor the GCF of each of the following:

| | | | |
|---|---|---|---|
| 1. $(8xy - 2y)$ | 2. $(27x^3 - 9x^2)$ | 3. $(42xy^5 + 7x^2)$ | 4. $(2x^2 - 12x)$ |

To factor the GCF out of an expression, divide each term by the GCF and write your answer in un-distributed form.

Factor the GCF out of each of the following:

| | | | |
|---|---|---|---|
| 5. $10x^3 - 5x$ | 6. $y^5 + y^2$ | 7. $27x - 81xy^2$ | 8. $10x - 14y + 40x^2$ |
| 9. $x^3y - x^5yz^3 + x^2y^2$ | 10. $17z^2 - 68zy^2$ | 11. $2x - 16y$ | 12. $5y + 20y^2 - 125$ |