9/27 <u>Adding Polynomials</u>

<u>mono</u>mial - one algebraic term $2x^2$, x, 5

<u>bi</u>nomial - two algebraic terms $y+6$, x^2+x

<u>tri</u>nomial - three algebraic terms x^2+2x+1

<u>p</u>olynomial - many algebraic (more than 1)

<u>Combine "Like" Terms</u> (CLT)

* you can only +/- terms that have the EXACT same <u>variable</u> raised to the same <u>power</u>.

Exs:

① $8x^2 - 4x + 1$
$+ -3x^2 + 5x - 8$
$\overline{}$
$5x^2 + x - 7 \Rightarrow 5x^2 + x - 7$

② $(3y^2 - 5y + 7) + (-5y^2 + 4y - 9)$

$-2y^2 - y - 2 \Rightarrow -2y^2 - y - 2$

add all sides

③ The perimeter of a △ has the sides, $5x + 3y$, $6x + 9y$, and $x - 3y$.

Find the perimeter in terms of x and y.

$$+\quad \begin{array}{r} 5x + 3y \\ 6x + 9y \\ x - 3y \\ \hline 12x + 9y \end{array}$$