

Adding & Subtracting Polynomials

You may **ONLY** add or subtract **LIKE** terms.

Vertically: line up the like terms & combine

$$\begin{array}{r}
 3x^3 + 2x^2 + 6 \\
 + 0x^3 + 3x^2 + 2 \\
 \hline
 \boxed{3x^3 + 5x^2 + 8}
 \end{array}$$

$$\begin{array}{r}
 4x^2 - 2x + 3 \\
 + (-2x^2 + 4x - 6) \\
 \hline
 \boxed{2x^2 + 2x - 3}
 \end{array}$$

Horizontally: use Associative & Commutative Properties to regroup & combine like terms

$$\begin{array}{l}
 3x^3 + 2x^2 + 6 + 3x^2 + 2 = \boxed{3x^3 + 5x^2 + 8} \\
 4x^2 - 2x + 3 + (-2x^2 + 4x - 6) = \boxed{2x^2 + 2x - 3}
 \end{array}$$

***REMEMBER:** When subtracting, you must write the opposite of **EACH** term (distribute the minus sign)