Algebra 1 ECA Remediation   Lesson 22

Adding Polynomials

1. List terms in descending order.
2. Line up like terms (they have the same variable and the same exponent)
3. Add the coefficients, rewrite the variables and the exponents for each term.

Example #1

Find each sum.

$$\left(2x^2+5x-7\right)+\left(3-4x^2+6x\right)$$

$$
\begin{aligned}
&2x^2+5x-7 \\
&\underline{(+)-4x^2+6x+3} \\
&{-2x^2+11x-4}
\end{aligned}
$$

Subtracting Polynomials

1. Distribute the negative sign to all terms in the second set of parenthesis.
2. List terms in descending order.
3. Line up like terms (they have the same variable and the same exponent)
4. Add the coefficients, rewrite the variables and the exponents for each term.

Example #2

Find each difference.

$$\left(3-2x+2x^2\right)-\left(4x-5+3x^2\right)$$

$$3-2x+2x^2-4x+5-3x^2$$

$$
\begin{aligned}
&2x^2-2x+3 \\
&\underline{(+)-3x^2-4x+5} \\
&{-x^2-6x+8}
\end{aligned}
$$