

Homework: Section 5.2 on Pg. 169; #1-8half

Warm-up: Arrange/Draw algebra tiles to simplify: $x^2 - 3x + 2 + 2x - 4x^2 - 5$



Answer (using variables):

$$\underline{-3x^2 - x - 3}$$

Constant(s) in answer:

$$\underline{-3}$$

Coefficient(s) in answer:

$$\underline{-3, -1}$$

Simplify: $(3x^2 - 4) + (-2x^2 - 4x + 1)$ by

Like terms

Circling like terms:

$$\boxed{3x^2} \quad \boxed{-4} \quad \boxed{-2x^2} \quad \boxed{-4x} \quad \boxed{+1}$$

$$\underline{= x^2 - 4x - 3}$$

Stacking:

$$\begin{array}{r|l} 3x^2 & -4 \\ \oplus -2x^2 & +1 - 4x \\ \hline = x^2 & -3 - 4x \end{array}$$

Simplify: $(-2x + x^2 + 3) - (2x^2 - 6x + 3)$ by

$$3 - 7 = 3 + (-7)$$

Circling like terms:

$$\boxed{-2x} + \textcircled{x^2} + \textcircled{3} - \textcircled{2x^2} + \boxed{6x} - \textcircled{3}$$

$$= \underline{4x - x^2}$$

Stacking:

$$\begin{array}{r} -2x + x^2 + 3 \\ \textcircled{+} + 6x - 2x^2 - 3 \\ \hline \end{array}$$

$$= \underline{4x - x^2}$$

Simplify: $(2 - 4x - 3x^2) + (6 - 2x^2 - 4x) - (5 - 8x)$ by

Circling like terms:

$$\boxed{2} - \textcircled{4x} - \textcircled{3x^2} + \boxed{6} - \textcircled{2x^2} - \textcircled{4x} - \boxed{5} + \textcircled{8x}$$

$$= \underline{3 - 5x^2}$$

Stacking:

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

$$\textcircled{+} -5 + 8x$$

$$= \underline{3 \quad -5x^2}$$