

6.1 Adding & Subtracting Polynomials

Verbal Problems

When completing verbal problems that involve polynomials:

always put () around the polynomials.

** Which keywords require you to switch the order?

less than

more than

subtracted from

1. What is the sum of $(2x - 3x^2 - 7)$ and $(3 - 5x - 5x^2)$?

$$\begin{aligned} & (2x - 3x^2 - 7) + (3 - 5x - 5x^2) \\ & \underline{\cancel{2x} - 3x^2 - 7} + \underline{\cancel{3} - \cancel{5x} - 5x^2} \\ & -8x^2 - 3x - 4 \end{aligned}$$

2. Subtract $(9n^2 - 5n + 4)$ from $(-4n^2 - 8n + 9)$.

$$\begin{aligned} & (-4n^2 - 8n + 9) - (9n^2 - 5n + 4) \\ & \underline{-4n^2 - 8n + 9} - \underline{9n^2 - 5n + 4} \\ & -13n^2 - 3n + 5 \end{aligned}$$

3. What is $(3x^2 - 6x + 5)$ less than $(5x^2 + 2x + 8)$?

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

4. What is the sum of $3ab + 5b - a$ and $2ab + 6a - b$?

$$\begin{aligned} & (3ab + 5b - a) + (2ab + 6a - b) \\ & 3ab + 5b - a + 2ab + 6a - b \\ & 5ab + 4b + 5a \\ & 5a + 5ab + 4b \end{aligned}$$

HOMEWORK

Worksheet - HW 6.1
Verbal Problems