

Feb. 19, 2018

Sect. 5-1

Adding and Subtracting Polynomials
Like Terms

Add / Subt.

Like Terms

Same "variable package"

$$2x \quad 3x \quad \text{Yes}$$

$$3xy \quad -2yx \quad \text{Yes}$$

$$6x^2y \quad 4x^2y \quad \text{Yes}$$

$$3x^2y \quad -2xy^2 \quad \text{No}$$

Addition:

$$(3x^3 - 2x - 4) + (4x^3 - 3x^2 + 2)$$

$$3x^3 + 4x^3 - 2x - 4 + 2 - 3x^2$$
$$7x^3 - 3x^2 - 2x - 2$$

$$(31m^4 + m^2 + 2m - 1) + (-7m^4 + 5m^3 - 2m + 2)$$

$$24m^4 + 5m^3 + m^2 + 1$$

$$(5x^4 - 6x^3 - 7x^2 + 1x - 1) + (4x^3 - 6x + 1)$$

$$5x^4 - 2x^3 - 7x^2 - 5x$$

$$(4m^4n^3 + 3m^2n - 4n) + (2n - 5m^2n + 2m)$$

$$4m^4n^3 - 2m^2n - 2n + 2m$$

Subtract

$$(a^3 - 2a^2 + 4) - (a^4 - 4a^3 - 3a^2)$$

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

$$(4x^3 + 2x^2 - 2x - 3) - (2x^3 - 3x^2 + 2)$$

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

$$\begin{aligned} & (-7m^3 + 2m + 4) - (-2m^3 - 4) \\ & \quad -5m^3 + 2m + 8 \end{aligned}$$