

Chapter 3 Review Lesson Solutions

Chapter 3 Review

What you need to know:

- 1) Exponent Laws
- 2) Communicate with Algebra
- 3) Collecting like terms
- 4) adding/subtracting polynomials
- 5) distributive property

Exponent Laws

Simplify the following expression:

$$\frac{(3x^3)^2}{2x^2 \cdot 3x^2}$$
$$= \frac{9x^6}{6x^4}$$
$$= \frac{3x^2}{2}$$

Communicate With Algebra

$$5x^7y^4 + 3x^{11}y^5 - 2x^2$$

Degree of the first term: 7

Degree of polynomial: 11

Classify Polynomial: Trinomial

Collect Like Terms

$$\underline{5x^3} + \underline{x^3} + \underline{3xy} - \underline{2x^3} + \underline{5xy} - 2x^2y$$
$$= 4x^3 + 8xy - 2x^2y$$

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Add/Subtract Polynomials

$$\begin{aligned} & (5x + 3) - (-6x - 7) + (3x - 5) \\ & = 5x + 3 + 6x + 7 + 3x - 5 \\ & = 14x + 5 \end{aligned}$$

Distributive Property

$$\begin{aligned} & 3x(x + 5) + 2(x^2 - 5x) \\ & = 3x^2 + 15x + 2x^2 - 10x \\ & = 5x^2 + 5x \end{aligned}$$

Complete Review Package