

2.4 Polynomial Operations

-D- Division of Polynomials

Case 1- Polynomial divided by a constant:

Ex 1: $(4x + 8) \div 2 =$

Ex 2: $\frac{6x - 18}{3} =$

Ex 3: $\frac{8x^2 + 12x + 16}{4} =$

Divide each term by the constant

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Case 2- Polynomial divided by a Monomial:

Ex 1: $(4x^2 + 2x) \div 2x =$

Ex 2: $\frac{-14x^3 + 35x^2}{7x^2} =$

Ex 3: $\frac{4x^3 + 8x^2 - 6x}{2x} =$

Divide each term by the Monomial. Following the laws of exponents.

Ex 4: Simplify by dividing

$$\frac{9x^3 + 6x^2 + 12x}{3x}$$

= _____

$$\frac{18a^2 + 12ab}{3a}$$

= _____

$$\frac{18x^2 + 8x + 6}{3}$$

= _____

$$\frac{20xy^5 - 15xy^2 + 30x^2y^4}{5xy}$$

= _____

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Practice:
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