September 8, 2014

Intro to Polynomials

Classifying Polynomials:

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

Standard Form:

Terms must be in order by exponent (largest to smallest)

Leading Coefficient:

Number in front of leading term

Degree:

Largest degree (exponent)

Constant:

Number without a variable

Classifying Polynomials:

Ex. 1
$$7y + 2y^3 - y^2 + 3y^4$$

- a. Standard Form:
- b. Leading Coefficient:
- c. Degree:
- d. Constant:

Ex. 2
$$-9t^2 + 3t^3 - 4t - 15$$

- a. Standard Form:
- b. Leading Coefficient:
- c. Degree:
- d. Constant:

Adding Polynomials:

Ex. 1
$$(5x - 8) + (7x + 10)$$

Ex. 2
$$(-a^2 + 2a - 8) + (2a^2 - 9a + 15)$$

Adding Polynomials:

Ex. 3 Find the sum of $(2x^2 + 8x + 4)$ and $(x^2 - 8x - 2)$

Ex. 4 Find the sum of $(-5w^2 + 3w - 8)$ and $(15w^2 - 4w + 11)$

Adding Polynomials:

Ex. 5 Find the perimeter of the following:



Ex. 6 Find the perimeter of the following:

Subtracting Polynomials:

Ex. 1 (-6x - 4) - (2x + 6)

Ex. 2 $(-7m^3 - m^2 - m) - (-10m^3 - m - 1)$

Subtracting Polynomials:

Ex. 3 $(4m^2 + 9m) - (2m^2 + 6)$

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