

Warmup:

$$1) (5n - 8n^3 + 7n^2) + (n^3 - 7 - n)$$

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

degree

"3"

Cubic

of terms

polynomial
w/ 4
terms

$$2) (3v^2 + 4 + 7v^4) - (8v^2 + 8v^3 + 5v^4)$$

$$2v^{\textcircled{4}} - 8v^3 - 5v^2 + 4$$

"quartic"

constant:

1 or 5

linear:

2x or x - 4

quadratic:

7x² + 1 or x²

x² + 6x + 5

quintic: 4x⁵ + 3x³ - 10x + 1

HW #1:

Adding and subtracting polynomials Key

Simplify each expression.

$$1) (2x^3 - 8x^2 - 3x^5) + (3x^3 - 3x^5 - 2x^2)$$
$$-6x^5 + 5x^3 - 10x^2$$

$$2) (2x^2 + 1 + 2x^3) + (6x^2 - 2x^3 + 8)$$
$$8x^2 + 9$$

$$3) (3n^3 + 7n - 3n^5) + (4 + 7n + 7n^5)$$
$$4n^5 + 3n^3 + 14n + 4$$

$$4) (5r^5 - 7r^2 - 1) + (3r^5 - 8 - 8r^2)$$
$$8r^5 - 15r^2 - 9$$

$$5) (4n^2 + 2n + 4n^5) - (8n - 4n^5 + 8)$$

$$8n^5 + 4n^2 - 6n - 8$$

$$6) (3x^2 - 8x - 2x^5) - (3x + 5x^5 + x^2)$$

$$-7x^5 + 2x^2 - 11x$$

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

$$-2x^4 - 4$$

$$8) (4x^2 + 4x^5 - 5x) - (x + 5 - 4x^5)$$

$$8x^5 + 4x^2 - 6x - 5$$

$$9) (2x^2 + 1 + 8x) + (6x - 5 - 3x^2)$$
$$-x^2 + 14x - 4$$

$$10) (5v^4 + 4v^2 + 1) - (v^4 + 2 - 3v^2)$$
$$4v^4 + 7v^2 - 1$$

$$11) (6 + 6x^4 - 4x^5) + (4x^4 - 8x^5 + 4)$$
$$-12x^5 + 10x^4 + 10$$

$$12) (7a^3 + 8a - 4) + (a - 1 + 4a^3)$$
$$11a^3 + 9a - 5$$

$$13) (8 - 4n^5 + 8n) - (4n^5 + 5n^2 - 7n)$$
$$-8n^5 - 5n^2 + 15n + 8$$

$$14) (8r^5 - 6r^3 - r^2) + (4r^3 + r^5 - 4r^2)$$
$$9r^5 - 2r^3 - 5r^2$$

$$15) (5ab^5 + a^3b + 2b^5) - (7ab^5 - 5b^5 + 5a^4b^2)$$
$$-2ab^5 - 5a^4b^2 + 7b^5 + a^3b$$

$$16) (2x^2y^5 - x^4 - 2) - (2x^2y^5 + 2 + 6x^4)$$
$$-7x^4 - 4$$

$$17) (2u^4 - 7u^3v^2 - uv^4) + (7uv^4 - 5u^4 - 3u^3v^2)$$
$$-10u^3v^2 + 6uv^4 - 3u^4$$

$$18) (8x^5y^4 - 3x^4y^5 + 5y^5) + (2x^5y^4 + 4x^4y^5 + 8y^5)$$
$$10x^5y^4 + x^4y^5 + 13y^5$$

Classifying Polynomials Game

Adding and Subtracting Polynomial Puzzle

Unit 2 Quiz #1