

## Homework 2.1 - Collecting Like Terms

Date \_\_\_\_\_ 5K \_\_\_\_\_

**Collect the like terms in descending order, then state the name of the polynomial.**

1)  $2x^2 - 5 + 11x^4 - 11x^4 - 2 + 3x^2$

$5x^2 - 7$

Binomial.

2)  $-4a^3b^2 + 11a^4b - 9a^4b^4 - a^4b + 8a^4b^4 + 9a^3b^2$

$-a^4b^4 + 10a^4b + 5a^3b^2$

Trinomial.

3)  $0.5v + 3.1v^3 - 9.9v^3 - 10.9v - 4.3 - 9.9v^3 - 10.9v - 4.3$

$-16.7v^3 - 21.3v - 8.6$

Trinomial.

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

$-4x^2y^4 - 12x^3y - 3x + 4$

Polynomial.

5)  $-4x^5 - 2x^4y^2 - 9x^3 - 10xy^4 + 11x^5 - xy^4 + 11xy^4 + 4x^4y^2$

$2x^4y^2 + 7x^5 - 9x^3$

Trinomial

$$6) -3.6 + 3.7v^3 - 1.6v^2 - 3.4v^4 - 4.648v^3 - 1.7v^2 - 2.7v^2 - 7.7v^3$$

$$\quad \quad \quad -3.4v^4 - 8.648v^3 - 6v^2 - 3.6$$

Polynomial.

$$7) -10x^3y + 12y^2 - 4x^3y + 6y^2$$

$$\quad \quad \quad -14x^3y + 18y^2$$

Binomial.

$$8) 8.8n^3 - 0.7 - 11.6n^3 + 9.4n^2 - 6.41 - 11.6n^3 + 9.4n^2 - 6.41$$

$$\quad \quad \quad -14.4n^3 + 18.8n^2 - 13.52$$

Trinomial.

$$9) -10n - 4 + 8n + 5n^3 - 6 + 10 + 3n^3 + 2n$$

$$\quad \quad \quad 8n^3$$

Monomial.

$$10) 6k^2 - 9k - 3k^4 + 5k^3 - 8k^4 - 5k^3 + 4k^2 + k - k + 6k^4 + 8k^3 + 12k^2$$

$$\quad \quad \quad -5k^4 + 8k^3 + 22k^2 - 9k$$

Polynomial.

$$11) 5x^3 + 6x^2 + 8x + 7 - 3x + 11x^3 - 2 + 2x^2 - 3x + 11x^3 - 2 + 2x^2$$

$$\quad \quad \quad 27x^3 + 10x^2 + 2x + 3$$

Polynomial