

Algebra Worksheet

Name _____

Date _____

1. Simplify

$$3x + 5x - 2x$$

$$= 6x$$

$$- 2x$$

$$= 4x$$

$$+ 7x$$

$$= 11x$$

$$- 3x$$

$$= 8x$$

$$+ 2x$$

$$= 10x$$

$$- 4x$$

$$= 6x$$

2. Simplify

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

$$= -3x^2 + 7x$$

$$- 2x^2 + 5x$$

$$= -4x^2 + 10x$$

$$+ 3x^2 - 6x$$

$$= -x^2 + 4x$$

$$- 2x^2 + 7x$$

$$= -3x^2 + 14x$$

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

$$= 2x^2 + 6x$$

$$- 4x^2 + 9x$$

$$= -2x^2 + 15x$$

3. Simplify

$$4x^3 + 2x^2 - 3x + 5x^3 - 7x^2 + 6x$$

$$= 9x^3 - 5x^2 + 3x$$

$$- 2x^3 + 4x^2 - 5x + 7x^3 - 8x^2 + 9x$$

$$= 14x^3 - 4x^2 + 4x$$

$$+ 3x^3 - 2x^2 + 4x - 6x^3 + 5x^2 - 7x$$

$$= 4x^3 + 3x^2 - 2x$$

$$- 5x^3 + 6x^2 - 8x + 7x^3 - 8x^2 + 9x$$

$$= 9x^3 - 2x^2 + x$$

$$+ 2x^3 - 3x^2 + 4x - 6x^3 + 5x^2 - 7x$$

$$= -1x^3 + 2x^2 - 3x$$

$$- 4x^3 + 5x^2 - 6x + 7x^3 - 8x^2 + 9x$$

$$= 2x^3 - 3x^2 + 3x$$

4. Simplify

$$3x^2 + 4x - 2x^2 + 5x - 3x^2 + 6x$$

$$= -2x^2 + 15x$$

$$- 4x^2 + 7x - 5x^2 + 8x - 6x^2 + 9x$$

$$= -17x^2 + 24x$$

$$+ 5x^2 - 6x + 7x^2 - 8x + 9x^2 - 10x$$

$$= 16x^2 - 14x$$

$$- 3x^2 + 4x - 5x^2 + 6x - 7x^2 + 8x$$

$$= -7x^2 + 18x$$

$$+ 2x^2 - 3x + 4x^2 - 5x + 6x^2 - 7x$$

$$= 12x^2 - 15x$$

$$- 8x^2 + 9x - 9x^2 + 10x - 11x^2 + 12x$$

$$= -16x^2 + 21x$$

5. Simplify

$$2x^3 + 3x^2 - 4x + 5x^3 - 6x^2 + 7x$$

$$= 7x^3 - 3x^2 + 3x$$

$$- 3x^3 + 4x^2 - 5x + 6x^3 - 7x^2 + 8x$$

$$= 10x^3 - 3x^2 + 3x$$

$$+ 4x^3 - 5x^2 + 6x - 7x^3 + 8x^2 - 9x$$

$$= 7x^3 + 3x^2 - 3x$$

$$- 8x^3 + 9x^2 - 10x + 9x^3 - 10x^2 + 11x$$

$$= 10x^3 - 1x^2 + 1x$$

$$+ 11x^3 - 12x^2 + 13x - 14x^3 + 15x^2 - 16x$$

$$= 7x^3 - 1x^2 + 7x$$

$$- 18x^3 + 19x^2 - 20x + 19x^3 - 20x^2 + 21x$$

$$= 7x^3 - 1x^2 + 7x$$

