

1.1 Add and Subtract Polynomials

Date _____ Period _____

Write each polynomial in standard form (SF). State the degree, leading coefficient (LC).

1) $5 - 5b^2$

SF:

Degree:

LC:

2) $2r + 3 + 7r^2$

SF:

Degree:

LC:

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

SF:

Degree:

LC:

Simplify each expression.

4) $(7x + 8x^4) + (7x + 2x^4)$

5) $(n + 6n^3) - (6n - 3n^3)$

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

7) $(6x^2 + 8x^4 + 3x^3) - (7x^4 + 4x^3 - 8x^2)$

$$8) (4x^3 + 3 - 4x) + (7x + 1)$$

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

Solve for the (?) polynomial.

$$10) \text{ Find the sum of } (4x^2 + 2x + 1) + (?) = (7x^2 + 5x + 4).$$

$$11) \text{ Find the sum of } (-2x^2 - 3x - 4) + (?) = (x^2 + 2x + 1).$$

$$12) \text{ Find the difference of } (7x^2 + 3x + 4) - (?) = (x^2 + x + 3).$$

$$13) \text{ Find the difference of } (-4x^2 - 2x + 5) - (?) = (6x^2 + 5x - 3).$$