

HW #1: Adding and Subtracting Polynomials

Simplify each expression.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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