

Algebra 1+ Adding and Subtracting Polynomials

Name _____

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Simplify each sum.

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

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

3) $(1 - 2n - 3n^4) + (1 - 2n^2 - n - 8n^4)$

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

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

6) $(2n^2 + 5 + 5n^3 - 7n) + (5n^3 + 5n - 6n^2 - 8)$

7) $(3a + 2a^2 + 6a^4 - 6a^3) + (4a^3 + 2a + 2a^4 + 7a^2)$

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

Simplify each difference.

$$9) (2x^3 + 2x + 4) - (2x + 3)$$

$$10) (7x^3 - 4x^2 - 3x^4) - (5x^3 - 3x^4)$$

$$11) (3a^3 - a + 2a^2) - (a^2 + 4 - 3a^3 + a)$$

$$12) (8 + 2x - 8x^4 + 2x^2) - (5x^2 - 2)$$

$$13) (5b + 3 - 7b^2 - 4b^3) - (2b^3 - 2 + 3b)$$

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

$$15) (5m^2 + 4m - 5 - 8m^3) - (3m^3 - m^2 + 5)$$

$$16) (6x^4 - 4x^2 + 6x - 2x^3) - (6x^3 + 2 - 3x^4 + 8x)$$