

## Adding and Subtracting Polynomials

**Simplify each expression.**

1)  $(5 + 5n^3) - (1 - 3n^3)$

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

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

4)  $(2a^2 + 4a^3) - (3a^3 + 8)$

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

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

7)  $(8b^3 + 8) - (6 - 7b^3)$

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

9)  $(10p^4 + 11) - (11p^4 + 13 + 16p^2)$

10)  $(20v^2 - 9v^3) - (7v^3 - 10v^4 - 14v^2)$

11)  $(10x^4 - 16) + (12 - 6x^3 + 11x^4)$

12)  $(14 + 12a^3) + (17a^4 + 15 - 5a^3)$

$$13) (4p - 1)^2$$

$$14) (7x - 6)(5x + 6)$$

$$15) (6n + 3)(6n - 4)$$

$$16) (8n + 1)(6n - 3)$$

$$17) (6k + 5)(5k + 5)$$

$$18) (3x - 4)(4x + 3)$$

$$19) (4a + 2)(6a^2 - a + 2)$$

$$20) (7k - 3)(k^2 - 2k + 7)$$

$$21) (7r^2 - 6r - 6)(2r - 4)$$

$$22) (n^2 + 6n - 4)(2n - 4)$$

$$23) (6n^2 - 6n - 5)(7n^2 + 6n - 5)$$