

Polynomial Quiz

Simplify each expression.

1) $(5n^4 - 3) + (2n^4 - 6)$

$7n^4 - 9$

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

$4n^4 - 5n^2 + 4n$

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

$7x^4 - 10x^2 - x$

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

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

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

$-2x^4 - 7x^2 - 10$

Find each product.

6) $4n^2(6n + 1)$

$24n^3 + 4n^2$

7) $7a(6a^2 + 8a + 7)$

$42a^3 + 56a^2 + 49a$

8) $(6n - 7)(2n - 8)$

$12n^2 - 62n + 56$

9) $(4x - 6)(5x + 7)$

$20x^2 - 2x - 42$

10) $(5a + 4b)(a - b)$

$5a^2 - ab - 4b^2$