

Multiplying a Polynomial by a Monomial

Find each product.

① $8a(8a + 6b)$

② $4(9b - 2t)$

③ $7x(4x - 8y)$

④ $a(-a + 3)$

⑤ $4(x^2 - 4xy - 8)$

⑥ $x^2(-x^2 + 3x + 7)$

⑦ $10x(2x - 10y)$

⑧ $2x^2(3x^2 - 6x + 12)$

⑨ $x^3(x^2 + 10 - 2x)$

⑩ $8r^2(4r^2 - 5r + 7)$

⑪ $14x(2x + 4y)$

⑫ $7a(8a^2 + 16a + 6)$

Multiplying a Polynomial by a Monomial

Answers

① $8a(8a + 6b)$

$64a^2 + 48ab$

② $4(9b - 2t)$

$36b - 8t$

③ $7x(4x - 8y)$

$28x^2 - 56xy$

④ $a(-a + 3)$

$-a^2 + 3a$

⑤ $4(x^2 - 4xy - 8)$

$4x^2 - 16xy - 32$

⑥ $x^2(-x^2 + 3x + 7)$

$-x^4 + 3x^3 + 7x^2$

⑦ $10x(2x - 10y)$

$20x^2 - 100xy$

⑧ $2x^2(3x^2 - 6x + 12)$

$6x^4 - 12x^3 + 24x^2$

⑨ $x^3(x^2 + 10 - 2x)$

$x^5 + 10x^3 - 2x^4$

⑩ $8r^2(4r^2 - 5r + 7)$

$32r^4 - 40r^3 + 56r^2$

⑪ $14x(2x + 4y)$

$28x^2 + 56xy$

⑫ $7a(8a^2 + 16a + 6)$

$56a^3 + 112a^2 + 42a$
