

Multiplying a Polynomial by a Monomial

Find each product.

1. $-3(8x + 5)$

2. $\frac{1}{2}x(8x - 6)$

3. $7xy(5x^2 - y^2)$

4. $5y(y^2 - 3y + 6)$

5. $-ab(3b^2 + 4ab - 6a^2)$

6. $4m^2(9m^2n + mn - 5n^2)$

Simplify.

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

8. $2b(b^2 + 8) - 3b(3b^2 + 9b)$

Solve.

9. Find the area of a rectangle with a length of 8 and a width of $(3x - 5)$.

10. Find the area of a rectangle with a length of $(4x^2)$ and a width of $(x + 6)$.