

Reteaching 13-7 *Multiplying Binomials*

Simplify $(2x - 7)(x + 5)$.

$$(2x - 7)(x + 5)$$

$$= 2x(x + 5) - 7(x + 5)$$

Use the Distributive Property, treating $(x + 5)$ as one number.

$$= \underbrace{2x \cdot x} + \underbrace{2x \cdot 5} - \underbrace{7 \cdot x} - \underbrace{7 \cdot 5}$$

Use the Distributive Property two more times.

$$= 2x^2 + 10x - 7x - 35$$

Simplify.

$$= 2x^2 + 3x - 35$$

Subtract $10x - 7x = 3x$.

So, $(2x - 7)(x + 5) = 2x^2 + 3x - 35$.

Simplify each product.

1. $(4x - 1)(2x + 7)$

2. $(x + a)(x + b)$

3. $(y - 9)^2$

4. $(x - 4)(x + 4)$

5. $(3m - n)(m + n)$

6. $(a - 14)(a + 8)$

7. $(k - 6)(k + 6)$

8. $(p + 5)^2$

9. $(a + b)(a - b)$

10. $(x + 1)^2$

11. $(a - b)(a - b)$

12. $(x + 4)(x - 4)$

13. A rectangle has length $4x + 3$ and height $3x - 7$. Find the area of the rectangle.
