Practice A

In Exercises 1-9, find the product.

1.
$$(x + 7)^2$$

1.
$$(x+7)^2$$
 2. $(2w-3)^2$ **3.** $(4q+2)^2$

3.
$$(4q + 2)^2$$

4.
$$(n+4)(n-4)$$

5.
$$(v-7)(v+7)$$

4.
$$(n+4)(n-4)$$
 5. $(v-7)(v+7)$ **6.** $(5x+2)(5x-2)$

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

7.
$$(6+a)(6-a)$$
 8. $(\frac{1}{3}+p)(\frac{1}{3}-p)$ **9.** $(x+2y)(x-2y)$

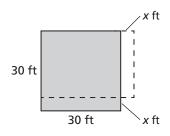
9.
$$(x + 2y)(x - 2y)$$

In Exercises 10–12, use special product patterns to find the product.

13. Describe and correct the error in finding the product.

$$(x-5)^2 = x^2 - 5^2$$
= $x^2 - 25$

14. A contractor modifies the size of a kitchen.



- **a.** The area of the room after the modification is represented by (30 + x)(30 - x). Find the product.
- **b.** Use the polynomial in part (a) to find the area when x = 6. Which room has the larger area, the original room or the new room? Explain.

In Exercises 15 and 16, find the product.

15.
$$(x^2 + 5)(x^2 - 5)$$

16.
$$(y^4 - 2)^2$$