9.3   P. 572 # 3 - 18 all, 23 - 37 odd

SQUARE OF A BINOMIAL Find the product.

3. $(x + 8)^2$

4. $(a + 6)^2$

5. $(2y + 5)^2$

6. $(t - 7)^2$

7. $(n - 11)^2$

8. $(6b - 1)^2$

ERROR ANALYSIS *Describe* and correct the error in multiplying.

9.

$(s - 3)^2 = s^2 + 9$ ✕

10.

$(2d - 10)^2 = 4d^2 - 20d + 100$ ✕

SUM AND DIFFERENCE PATTERN Find the product.

11. $(t + 4)(t - 4)$

12. $(m - 6)(m + 6)$

13. $(2x + 1)(2x - 1)$

14. $(3x - 1)(3x + 1)$

15. $(7 + w)(7 - w)$

16. $(3s - 8)(3s + 8)$

17. ★ **MULTIPLE CHOICE** Find the product $(7x + 3)(7x - 3)$.

    Ⓐ $7x^2 - 9$ Ⓑ $49x^2 - 9$ Ⓒ $49x^2 - 21x - 9$ Ⓓ $49x^2 - 42x - 9$

18. ★ **MULTIPLE CHOICE** Find the product $(5n - 3)^2$.

    Ⓐ $5n^2 - 9$ Ⓑ $25n^2 - 9$ Ⓒ $25n^2 - 15n + 9$ Ⓓ $25n^2 - 30n + 9$

SPECIAL PRODUCT PATTERNS Find the product.

23. $(r + 9s)^2$ **25.** $(3m + 11n)(3m - 11n)$

                     27. $(3m - 7n)^2$

29. $(3f - 9)(3f + 9)$ **31.** $(3x + 8y)^2$

                     33. $(2a - 5b)(2a + 5b)$

MULTIPLYING FUNCTIONS Perform the indicated operation using the functions $f(x) = 3x + 0.5$ and $g(x) = 3x - 0.5$.

35. $f(x) \cdot g(x)$ **37.** $(g(x))^2$