LESSON 10.3

NAME _____ DATE _____

Practice C

For use with pages 590–596

Write the product of the sum and difference.

1. $(x + 5)(x - 5)$
2. $(t + 4)(t - 4)$
3. $(3x + 5)(3x - 5)$
4. $(7x + 6)(7x - 6)$
5. $(5n + 5)(5n - 5)$
6. $(9x + 3)(9x - 3)$
7. $(6 + 4d)(6 - 4d)$
8. $\left(8x + \frac{5}{2}\right)\left(8x - \frac{5}{2}\right)$
9. $(m + n)(m - n)$
10. $\left(\frac{1}{3}x + y\right)\left(\frac{1}{3}x - y\right)$
11. $\left(x - \frac{4}{5}y\right)\left(x + \frac{4}{5}y\right)$
12. $(6x + 5y)(6x - 5y)$

Write the square of the binomial as a trinomial.

13. $(x + 3)^2$
14. $(x - 9)^2$
15. $(x + 2y)^2$
16. $(2m + 3)^2$
17. $(7y - 3)^2$
18. $(5y - 3)^2$
19. $\left(b - \frac{2}{3}\right)^2$
20. $\left(m + \frac{1}{2}\right)^2$
21. $(8k + 3)^2$
22. $(x - 0.3)^2$
23. $(7c - 2d)^2$
24. $(5n + 4m)^2$

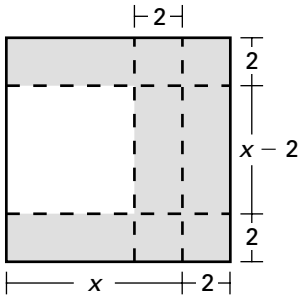
Find the product.

25. $(c + 5)(c - 5)$
26. $(5m + 2)(5m - 2)$
27. $(v - w)(v + w)$
28. $\left(\frac{1}{3}x + 6\right)\left(\frac{1}{3}x - 6\right)$
29. $(9x - 7)(9x + 7)$
30. $(8n + 5)^2$
31. $(3y - 2x)^2$
32. $(5b - 7c)^2$
33. $(7x + y)^2$

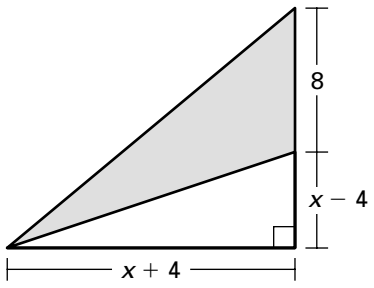
Use mental math to find the product.

34. $36 \cdot 44$
35. 18^2
36. 52^2

37. ***Area Model*** Find an expression for the area of the shaded region shown below. Then evaluate the expression when x is equal to 5 inches; to 6 inches; and to 7 inches.



38. ***Area Model*** Find an expression for the area of the shaded region shown below. Then evaluate the expression when x is equal to 5 inches; to 7 inches; and to 9 inches.



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