Name _____ Date _____

LESSON 2.5

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Practice A

For use with the lesson "Solve Equations with Variables on Both Sides"

Describe each step used in solving the equation.

1. $10x - 7 = 4x + 5$

A. $6x - 7 = 5$

B. $6x = 12$

C. $x = 2$

2. $3x + 6 = -2x + 11$

A. $5x + 6 = 11$

B. $5x = 5$

C. $x = 1$

3. $6(3x - 4) = 12$

A. $18x - 24 = 12$

B. $18x = 36$

C. $x = 2$

4. $6(x + 3) = 5x + 8$

A. $6x + 18 = 5x + 8$

B. $x + 18 = 8$

C. $x = -10$

5. $4(x - 2) = 7x + 1$

A. $4x - 8 = 7x + 1$

B. $-8 = 3x + 1$

C. $-9 = 3x$

D. $-3 = x$

6. $2x + 2 = 4(x - 5)$

A. $2x + 2 = 4x - 20$

B. $2 = 2x - 20$

C. $22 = 2x$

D. $11 = x$

Solve the equation and describe each step you use.

7. $6p - 3 = 4p - 1$

8. $10a - 2 = 7a + 4$

9. $5(m + 2) = 20$

Solve the equation, if possible.

10. $9x - 2 = 8x + 7$

11. $5n - 3 = 3n + 1$

12. $4z - 5 = 8z + 3$

13. $-a + 4 = a + 6$

14. $w + 8 = w - 3$

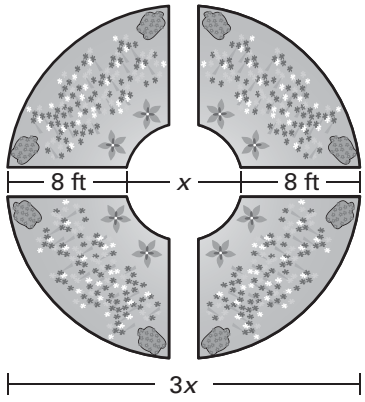
15. $2(y - 3) = y + 4$

16. $3(m + 2) = 8 + m$

17. $6 + x = 6(x - 5)$

18. $7(b + 3) = 7b - 4$

19. **Dimensions of a Circular Flower Garden** A flower garden has the shape shown. The diameter of the outer circle is three times the diameter of the inner circle. The lengths of the walkways are 8 feet long. What is the diameter of the inner circle?



20. **Distance-Rate-Time** Two cars travel the same distance. The first car travels at a rate of 50 miles per hour and reaches its destination in t hours. The second car travels at a rate of 60 miles per hour and reaches its destination 1 hour earlier than the first car. How long does it take for the first car to reach its destination?

Rate of car 1	·	Time for car 1	=	Rate of car 2	·	Time for car 2