

LESSON
2.4**Practice A**

For use with the lesson "Solve Multi-Step Equations"

Check whether the given number is a solution of the equation.

1. $6x + 1 - 5x = 7; 2$

2. $7 + 2(m - 4) = 3; 1$

3. $\frac{1}{2}(8x - 6) = 1; 1$

State the first step in solving the equation.

4. $13y + 7y - 6 = 11$

5. $5(a - 4) = 44$

6. $\frac{1}{3}(m - 4) = 5$

7. $7 + 6(w - 3) = 31$

8. $8d - 4 - 6d = 22$

9. $7 - 3(p + 6) = 27$

Solve the equation.

10. $3a + 2a + 7 = 12$

11. $9n - 4 + n = 16$

12. $7c + 3 - 5c = 15$

13. $16 - 3y + 4y = 27$

14. $2 + 3(x + 1) = 17$

15. $15 + 4(m - 2) = 21$

16. $2p + 3(p + 3) = 21$

17. $6w + 5(w - 2) = 23$

18. $7 - 3(x + 2) = 4$

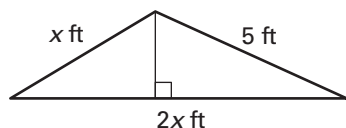
19. $\frac{1}{4}(d - 5) = 1$

20. $\frac{1}{3}(m + 6) = 4$

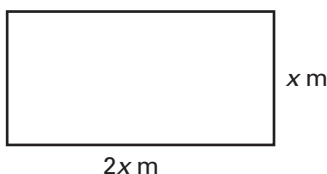
21. $\frac{1}{8}(w - 7) = 5$

Find the value of x for the triangle or rectangle.

22. Perimeter = 17 feet



23. Perimeter = 18 meters



24. **Target Heart Rate** The target heart rate is the heartbeat rate during aerobic exercise that provides a benefit to your heart. The target heart rate for a person exercising at 70% intensity is given by the equation $y = 0.7(200 - x)$ where y is the target heart rate in beats per minute and x is the person's age in years.

- How old is a person with a target heart rate of 133 beats per minute?
- How old is a person with a target heart rate of 126 beats per minute?

25. **Spare Change** You have quarters and nickels saved in a piggy bank. There is a total of \$3.45 in quarters and nickels and there are 9 more nickels than quarters.

- Use the verbal model to write an equation that you can use to find the number of nickels and quarters in your piggy bank. Let q represent the number of quarters.

Number of quarters	•	Value of 1 quarter	+	Number of nickels	•	Value of 1 nickel	=	Total amount in piggy bank
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- How many nickels and quarters are in the piggy bank?