Practice A

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

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

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

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

4.
$$13y + 7y - 6 = 11$$
 5. $5(a - 4) = 44$ **6.** $\frac{1}{3}(m - 4) = 5$

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

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

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

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

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

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

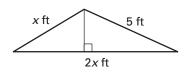
19.
$$\frac{1}{4}(d-5) = 1$$

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

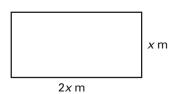
19.
$$\frac{1}{4}(d-5)=1$$
 20. $\frac{1}{3}(m+6)=4$ **21.** $\frac{1}{8}(w-7)=5$

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

Value of 1 quarter Number of nickels

Value of 1 nickel

Total amount in piggy bank

b. How many nickels and quarters are in the piggy bank?