Match the verbal sentence with its equation or inequality.

- **1.** The difference of 4 and a number n is equal to 14.
- **A.** $n 4 \le 14$
- **2.** The difference of a number n and 4 is no more than 14.
- **B.** $n 14 \le 4$
- **3.** The difference of 4 and a number *n* is at least 14.
- **C.** 4 n = 14
- **4.** The difference of a number n and 14 is at most 4.
- **D.** $4 n \ge 14$

Write an equation or an inequality.

- **5.** The sum of 8 and a number n is equal to 15.
- **6.** The product of 5 and a number y is at least 22.
- **7.** The difference of a number x and 6 is 19.
- **8.** The quotient of a number b and 7 is more than 25.

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

9.
$$x + 14 = 19; 5$$

10.
$$2m + 3 = 11; 3$$

10.
$$2m + 3 = 11; 3$$
 11. $\frac{b}{3} + 4 = 7; 9$

12.
$$4a - 5 \le 10; 4$$

13.
$$22 - y > 13; 8$$

14.
$$\frac{p}{5} - 8 > 1;40$$

Solve the equation using mental math.

15.
$$x + 17 = 22$$

16.
$$y + 4 = 16$$

17.
$$m - 8 = 12$$

18.
$$10c = 50$$

19.
$$3w = 36$$

20.
$$\frac{a}{6} = 3$$

- **21.** Locker Installation Your school is replacing a section of old lockers. When the old lockers are removed, there is a space that is 165 inches long. Each new locker has a width of 11 inches. You write the equation 11x = 165 to model the situation. What do the 11, x, and 165 represent? Use mental math to solve the equation.
- **22.** Snowboarding You have saved \$78 to buy a snowboard that costs \$150. How much more money do you need to save to be able to buy the snowboard?
- **23. Die-Cast Cars** You buy a storage case that holds 150 collectible die-cast cars. You have 132 die-cast cars. Write an inequality that describes how many more cars you can buy and still have no more cars than the case will hold. You buy 24 cars. Will they all fit in the case?