## Vocabulary

1. Explain what a variable is.

## In 2-8, write the correct symbol for each mathematical verb.

- 2. is less than
- 3. is approximately equal to
- 4. is greater than or equal to
- 5. is equal to
- 6. is less than or equal to
- 7. is not equal to
- 8. is greater than
- 9. Tell whether or not the given sentence is an open sentence. Write yes or no.

**b.** 
$$6\frac{1}{2} < 6\frac{5}{8}$$
 **c.**  $m^2 = 81$ 

c. 
$$m^2 = 81$$

d. 
$$24 < 8A$$

**d.** 
$$24 < 8A$$
 \_\_\_\_\_ **e.**  $y \ge 14$  \_\_\_\_\_ **f.**  $0.1855 - w$  \_\_\_\_

f. 
$$0.1855 - w$$

- 10. Write an inequality comparing  $\frac{6}{11}$  and  $\frac{1}{2}$ 
  - a. using the symbol ">."
  - b. using the symbol "<"
- 11. Write an inequality comparing  $\frac{3}{4}$  and  $\frac{5}{6}$ 
  - a. using the symbol "≥"
  - b. using the symbol "≤"

In 12-14, let r = Ruth's math test score. Write a sentence in words for each algebraic sentence.

12. 
$$r \ge 84$$

13. 
$$r \neq 84$$

14. 
$$r < 100$$

- 15. Give a number that is a solution to the sentence in Question 14.
- 16. Let A = the land area of Rhode Island in square miles. Write in inequality to describe the following statement:

The land area of Rhode Island is less than 2,000 square miles.

Skills Objective A: Find solutions to open sentences using trial and error.

- 17. Which of the numbers 3, 6, and 10 are solutions of 4 + n = 10?
- 18. Which of the numbers 4, 5, and 8 are solutions of  $9 b = 4 \cdot b 11$ ?
- 19. Which of the numbers 1, 4, and 7 are solutions of  $2 \cdot m \ge 8$ ?
- 20. Which of the numbers 8, 15, and 20 are solutions of  $\frac{h}{4} < 8$ ?

In 21 and 22, give three solutions to each open sentence.

21. 
$$u > 4.8$$

**22.** 
$$v \le 13.5$$

In 23 and 24, give both solutions to the equation.

23. 
$$a^2 = 64$$

24. 
$$d^2 = 1$$

25. Give an example of an inequality for which 6 is a solution.