## **Skills Practice: Solving Inequalities**

Solve each inequality. Describe the solution set using interval notation. Then, graph the solution set on a number line.

$$1. \frac{z}{-4} \ge 2$$

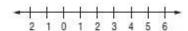


$$3.16 < 3q + 4$$



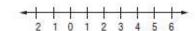
5. 
$$3x \ge -9$$

$$7.2z < -9 + 5z$$



$$9. -3s - 8 \le 5s$$

11. 
$$0.7m + 0.3m \ge 2m - 4$$

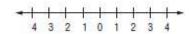


13. 
$$1.7y - 0.78 > 5$$

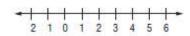
$$2.3a + 7 \le 16$$



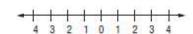
4. 
$$20 - 3s > 7s$$



6. 
$$4b - 9 \le 7$$



8. 
$$7f - 9 > 3f - 1$$



10. 
$$7t - (t - 4) \le 25$$



12. 
$$4(5x + 7) \le 13$$

14. 
$$4x - 9 > 2x + 1$$



Define a variable and write an inequality for each problem. Then solve.

- 15. Nineteen more than a number is less than 42.
- 16. The difference of three times a number and 16 is at least 8.
- 17. One half of a number is more than 6 less than the same number.
- 18. Five less than the product of 6 and a number is no more than twice that same number.