Name Date

# Chapter **Test A**

Write an inequality for the graph.



#### **Answers**

- 3. \_\_\_\_\_
- 4. \_\_\_\_\_

5. \_\_\_\_\_

7. \_\_\_\_

8. \_\_\_\_

9. \_\_\_\_\_

Write the word sentence as an inequality.

- **3.** A number n is no less than -3.
- **4.** A number q plus 7 is less than 45.

- **5.** A number x divided by -1 is at least -4.
- **6.** The children in the class are more than 10 years old.
- **7.** The minimum cost for parking is \$3.

Tell whether the given value is a solution of the inequality.

8. 
$$j + 1 > 10$$
;  $j = 9$ 

9. 
$$-3 \le \frac{k}{2}$$
;  $k = -1$ 

10.	A freezer is set to turn on and start cooling if the temperature rises above $-10^{\circ}$ Celsius. The
	cooling turns off when the freezer has
	reached a temperature of $-16^{\circ}$ Celsius. Write two inequalities to
	model the situation. Give a sample value at which the cooling would turn on, and a sample value at which the cooling would be off.

- 11. An elevator can carry 800 pounds of weight.
  - **a.** A student weighing 95 pounds gets on the elevator. Write and solve an inequality to represent the remaining weight that can be added.
  - **b.** A football player weighing 280 pounds gets on the elevator with the student. Write and solve an inequality representing the remaining weight that can be added.
  - **c.** Two more football players weighing a total of 470 pounds come to the elevator. Can they get on safely? Explain.

### Solve the inequality.

**12.** 
$$x - 3 > 7$$

**13.** 
$$m + 2 \le -4$$
 **14.**  $6y > 8$ 

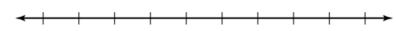
**14.** 
$$6y > 8$$

#### **Answers**

**15.** 
$$p \div 5 < -3$$
 **16.**  $4z - 3 \ge -1$  **17.**  $6 > 3(t + 2)$ 

Solve the inequality. Graph the solution.

**18.** 
$$-4 + x \le 1$$



See left.

**19.** 
$$2 < -\frac{y}{5}$$

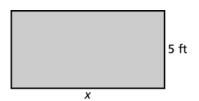


**20.** 
$$3(x+4) \ge 12$$



## Write and solve an inequality that represents the value of x.

**21.** The perimeter is more than 15 feet.



**22.** The area is no more than 40 square feet.

