$\qquad$

## Chapter 4 <br> Test A

Write an inequality for the graph.
1.

2.


Answers

1. $\qquad$
2. $\qquad$
3. $\qquad$
4. $\qquad$

Write the word sentence as an inequality.
5. $\qquad$
6. $\qquad$
7. $\qquad$
4. A number $q$ plus 7 is less than 45 .
8. $\qquad$
9. $\qquad$
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.

$$
\text { 8. } j+1>10 ; j=9
$$

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

## Chapter 4 <br> Test A (continued)

Solve the inequality.
12. $x-3>7$
13. $m+2 \leq-4$
14. $6 y>8$
15. $p \div 5<-3$
16. $4 z-3 \geq-1$
17. $6>3(t+2)$

Solve the inequality. Graph the solution.
18. $-4+x \leq 1$


## Answers

12. $\qquad$
13. $\qquad$
14. $\qquad$
15. $\qquad$
16. $\qquad$
17. $\qquad$
18. $\qquad$

See left.
19. $\qquad$ See left.
20. $\qquad$
See left.
19. $2<-\frac{y}{5}$

20. $3(x+4) \geq 12$


Write and solve an inequality that represents the value of $\boldsymbol{x}$.
21. The perimeter is more than 15 feet.

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


