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## 3-1 <br> Practice <br> Inequalities and Their Graphs

Write an inequality that represents each verbal expression.

1. $a$ is greater than 4.


2. $c$ is less than or equal to -2 .
3. $m$ is greater or equal to 1 .
4. $f$ is less than 2 .
$f \square 2$

Determine whether each number is a solution of the given inequality. The first step is shown.
5. $2 x+4<20$
a. 2

Substitute 2 for $x$

$$
2(2)+4 \stackrel{?}{<} 20
$$

b. 10

$$
\text { Substitute } 10 \text { for } x . \quad 2(10)+4 \stackrel{?}{<20}
$$

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Practice (continued)

Graph each inequality.
6. $m<1$
7. $n \geq 5$
8. $j>-4$
9. $k \leq 10$

Write an inequality for each graph.


Define a variable and write an inequality to model each situation.
12. No more than 10 people may use the treadmills at any time in the gym.

Let $n=$
 10
13. To train for a marathon, a runner decides that she must run at least 12 miles each day.

Let $d=$


