## Werbal Phrases Addition wore than, sum, plus, increased by, added to

product of, multiplied by, times, of

quotient of, divided by

Subtraction

Division

Multiplication

less than, subtracted from, difference, decreased by, minus

Inequality Symbols				
Symbol	<	>	≤	≥
Key	• is less than	• is greater than	• is less than or equal to	• is greater than or equal to
phrases	• is fewer than	• is more than	<ul><li> is at most</li><li> is no more than</li></ul>	<ul><li>is at least</li><li>is no less than</li></ul>

Write each sentence as an inequality.

- **a.** A number w minus 3.5 is less than or equal to -2,
- **b.** Three is less than a number *n* plus 5.
- **c.** Zero is greater than or equal to twice a number x plus 1.

A number b is fewer than 30.4.

Tell whether -4 is a solution of each inequality.

**a.** 
$$x + 8 < -3$$

**b.** 
$$-4.5x > -21$$

Tell whether –6 is a solution of the inequality.

$$c + 4 < -1$$

$$4x - 25 > -2$$

Graph each inequality.

**a.** 
$$y \le -3$$

**b.**  $\frac{5}{2} < x$ 

## Writing and Interpreting Inequalities



## **EXAMPLE 4**

## Writing an Inequality from a Graph



The graph shows the height restriction h (in inches) for a ride at an amusement park. Write and interpret an inequality that represents the height restriction for the ride.



The graph shows the height restriction h (in inches) for a ride at a water park. Write and interpret an inequality that represents the height restriction for the ride.

