

# Section Overview

## Inequalities

Lesson 3-5

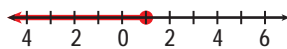
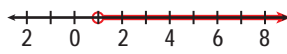
**Why?** Students must be able to recognize and interpret inequalities before they can solve them and understand how to apply them.

### Inequality

$x < 1$

$x \geq 1$

### Graph



○ Use an open circle when the graph does not include the point.

● Use a closed circle when the graph includes the point.

Word Phrase	Inequality	Sample Solutions	Solution Set
$x$ is less than 5	$x < 5$	$x = 4$ $4$ $5$ $x = 2.1$ $2.1$ $5$	
$a$ is greater than 0 $a$ is more than 0	$a > 0$	$a = 7$ $7$ $0$ $a = 25$ $25$ $0$	
$y$ is less than or equal to 2 $y$ is at most 2	$y \leq 2$	$y = 0$ $0$ $2$ $y = 1.5$ $1.5$ $2$	
$m$ is greater than or equal to 3 $m$ is at least 3	$m \geq 3$	$m = 17$ $17$ $3$ $m = 3$ $3$ $3$	

