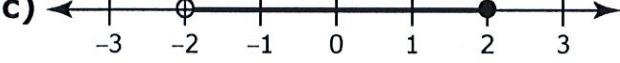


## Section 9.1 Extra Practice

1. Write a word statement to express the meaning of each inequality.

Inequality	Word Statement
a) $m > -2$	all numbers greater than negative two
b) 	all numbers less than negative two
c) 	all numbers greater than negative two and less than or equal to two
d) $m \geq 2$	all numbers greater than or equal to two

2. Circle true or false for each of the following statements. If the statement is false, rewrite it to make it true.

a) **True / False** A closed circle indicates that the boundary point is not a possible value.

An open circle indicates that the boundary point is not a possible value.

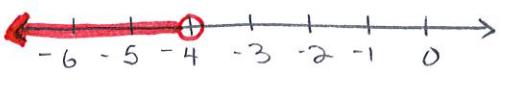
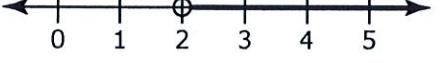
b) **True / False** The inequality  $-4 < x$  means  $x$  is greater than  $-4$ .

c) **True / False** A boundary point is always shown on a number line using an open circle.

A boundary point can be shown on a number line using either an open circle or closed circle.

For #3 to #6, fill in the missing information.

- Represent the inequality verbally using a real-life context.
- Represent the inequality graphically.
- Represent the inequality algebraically.

a) Verbally	b) Graphically	c) Algebraically
<b>Example:</b> The height of a rocket that is launched 1 m below sea level		$h \geq -1$ , where $h$ is the height of the rocket
<b>3.</b> The temperature below $-4^{\circ}\text{C}$		$t < -4$ , where $t$ is the temperature
<b>4.</b> <i>Answers vary</i>		$2 \geq x$
<b>5.</b>		$x > 2$
<b>6.</b>		$x \geq 0$ and $x \leq 5$