

## Check-In Linear Inequalities

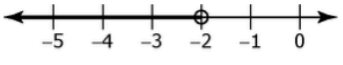
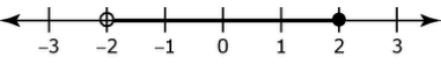
### Outcome PR-4 Single variable linear inequalities

1) Choose the term from the list below that best matches the description or definition.

boundary point	inequality	closed circle
open circle	number line	solution

- a) A value or values that satisfy an inequality \_\_\_\_\_
- b) Shows the boundary point is included in the solution \_\_\_\_\_
- c) A math statement comparing expressions that may not be equal \_\_\_\_\_
- d) Shows the boundary point is not included in the solution \_\_\_\_\_

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

Inequality	Word Statement
a) $m > -2$	
b) 	
c) 	
d) $m \geq 2$	

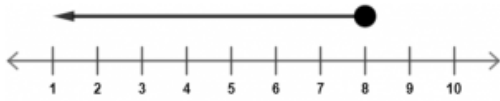
3) Circle true or false for each of the following statements. If the statement is false, rewrite it to make it true.

- a) A closed circle indicates that the boundary point is not a possible value.      True      False  
\_\_\_\_\_
- b) The inequality  $-4 < x$  means  $x$  is greater than  $-4$ .      True      False  
\_\_\_\_\_
- c) A boundary point is always shown on a number line using an open circle.      True      False  
\_\_\_\_\_

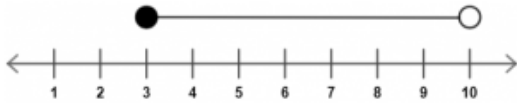
4) Write an inequality to represent the statement, "The pilot was less than 1.9 m tall".

5) Express each inequality shown on the number line algebraically.

a)



b)



6) What is the difference between  $x > 3$  and  $x \geq 3$  ?

7) Solve each of the following:

a)  $3x \leq -36$

b)  $9.3 > -2x$

c)  $y + 7 \geq 12$

d)  $-5 < -x + 3$

8) Verify if  $3 \geq x$  is the solution to  $-9 \geq -\frac{1}{3}x$ .

Progress for Outcome PR4:

