

Journal Entry:

1. What is a compound word? Give an example. Relate this to why you think  $-4 < x < 5$  is called a compound inequality?
2. The intersection of two roads is the place where the roads cross. How would you define the intersection of two groups of objects?

Oct 28-8:10 AM

### Chapter 3 Solving Inequalities

-solve and graph inequalities, using sets, absolute value equations and inequalities

Oct 28-8:10 AM

### Section 3-1 Inequalities and Their Graphs

Students will be able to:  
-write, graph, and identify solutions of inequalities.

Oct 28-8:10 AM

Getting Ready, Solve It  
on page 165

-Read through and solve the maximum height for a building on the street.

-methods?

Oct 28-8:10 AM

Define:

-inequality: *comparing things that are not equal.*

$$x < 10$$

$$y \geq -4$$

$$-10 \leq x$$

Oct 28-8:10 AM

Write the inequality:

all real numbers  $p$  greater than or equal to 1.5

$$p \geq 1.5$$

the sum of  $t$  and 7 is less than -3

$$t + 7 < -3$$

Oct 28-8:10 AM

A solution to an inequality is any number that makes it true.

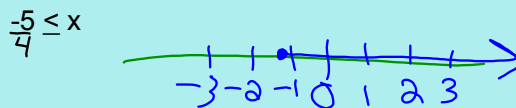
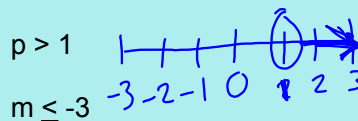
Consider the numbers -1, 0, 1, and 3.  
Which are solutions to  $13 - 7y \leq 6$ ?

No -1  $13 - 7(-1) \leq 6$   
 No 0  $13 - 0 \leq 6$   
 Yes 1  $13 - 1(7) \leq 6$   
 Yes 3  $13 - 7(3) \leq 6$

Oct 28-8:10 AM

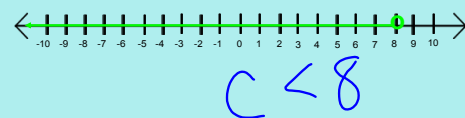
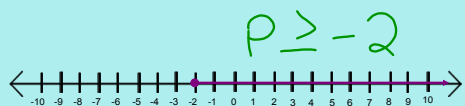
You can use a graph to indicate all of the solutions of an inequality.

Graph:



Oct 28-8:10 AM

What is the inequality represented?



Oct 28-10:15 AM

Write the inequality:

Ride Passes starting at \$19.99

$p \geq 19.99$

25 mph

$x \leq 25$

Oct 28-10:15 AM

Hwk: pg. 168 - 170  
 #8-16 evens, 18 - 34 (4th),  
 36 - 46 evens, 56, 60

Oct 28-10:15 AM