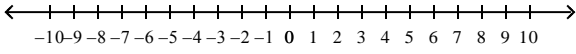
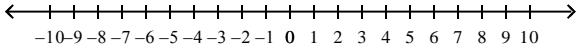
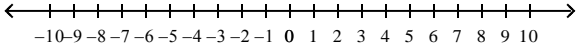
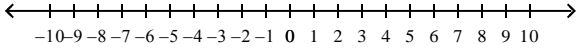
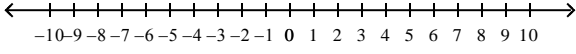
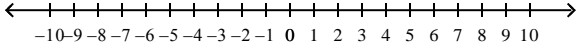


**Algebra I**  
**Lesson 3.2 – Solving Inequalities by Adding or Subtracting**  
**Mrs. Snow, Instructor**

Adding and subtracting inequalities is a continuation of our introduction in section 3.1.

**Solve and graph:**

$s + 1 < 10$  	$2\frac{1}{2} > -3 + t$  
$8 + r \geq 12$  	$14 \geq x - 6$  
$12 \leq y + 5$  	$q - 3.5 < 7.5$  

Inequalities also are frequently used in application problems. What are some words or phrases you may read that will indicate the story problem is an inequality? What kind of symbol would you use for each of these phrases?

*no more than.....*

*(what symbol?)*

Cool Springs Café has a maximum seating capacity of 48 people. If there are already 21 customers how many more may be seated? Write an inequality to show how many more customers may be served.

Holloway's Grocery offers free delivery of groceries to your home if the purchase amount of your groceries is at least \$35. Your order totals \$28.77. Write and solve an inequality to determine how much more you must spend for the store to deliver your order free of charge.

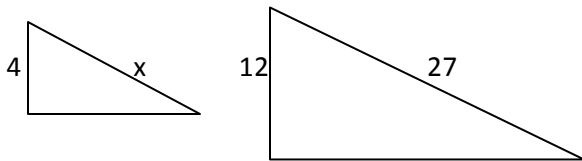
$$4x + 3y = 12 \text{ solve for } y$$

$$3h + ht = g \text{ solve for } h$$

$$s = \frac{d}{t} \text{ solve for } t$$

$$2x + 3y = 8 \text{ solve for } x \text{ when } y = 2$$

Solve for  $x$ :



Write an inequality shown by the graph below:

