SSR

Read silently until 9:15

Opener

1. Suppose a 24-acre plot of land is being divided into $\frac{1}{3}$-acre lots for a housing development. How many lots will there be in the development?

2. Simplify: $2x - 9x + 8x - 12$

3. Todd can run ¼ mile in 1 1/3 minutes. What is his speed in miles per minute?

Learning Target

I can solve and graph an inequality on a number line.

Inequalities

What does each of the symbols mean?

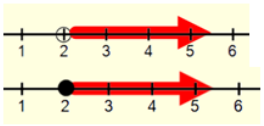
>	≤	>	≥

When we work with inequalities, we use a _____ to show our solution. Why do you think that is?

1. Pete's Painting charges $40 per room to paint, plus an additional $0.15 per square foot that they paint. If they charged me $201 to paint my kitchen, create the equation to find how many square feet did they paint?

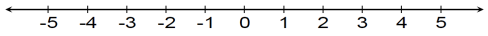
2. Simplify

$-3 - 4(2x + 3) - (8x + 1)$

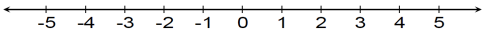
Rules for graphing:	What is the difference between an open and closed circle? What does filling in the circle mean in terms of the solution?
≤, ≥ have a _____ circle <, > have an _____ circle	

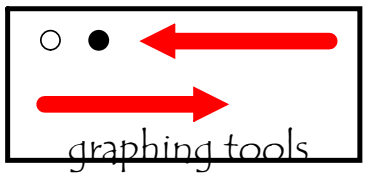
Graph each inequality below.

1. $x \leq 2$

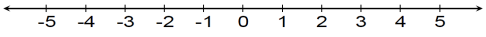


2. $x < -4$

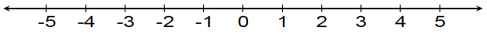




3. $x \geq 3$



4. $x > 0$



3. If Matthew gets $10 per hour to mow the lawn and $8 extra for raking up the clippings, write a formula that could be used to determine how much money (M) he would make after working *h* hours. (Assumer he always rakes up the clippings.)

4. Matthew earned $83.25. How many hours did he work?

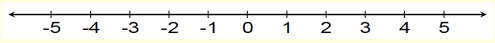
Solving Inequalities: You solve an inequality like you solve an ___ _____ _.

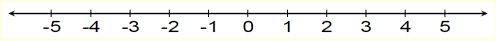
Practice Examples:

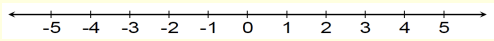
1. $2x-8\leq -8$

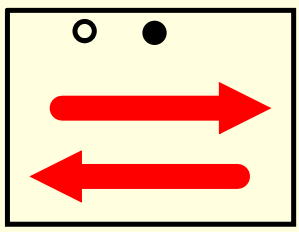
2. $3x+2\geq 11$

3. $\frac{1}{2}x-6<-8$









graphing tools

Rewrite homework problems to complete TONIGHT

5. When the perimeter of a rectangle is 40 units and the width is 8 units less than the length. Create the equation that can be used to determine the length of the rectangle. (Draw a picture)

6. Solve

$$3 - \frac{3}{4}b = -6$$

Expectations

Solve and graph the inequality on page 122 on your notes page you will make the *x* or *o*

Hollywood playing RULES

Level 0: First Minute

Level 1: 2 minutes to collaborate

Level 0: Team member graphing while I check their INB

HOLLYWOOD SQUARES IS

LIKE TIC-TAC-TOE

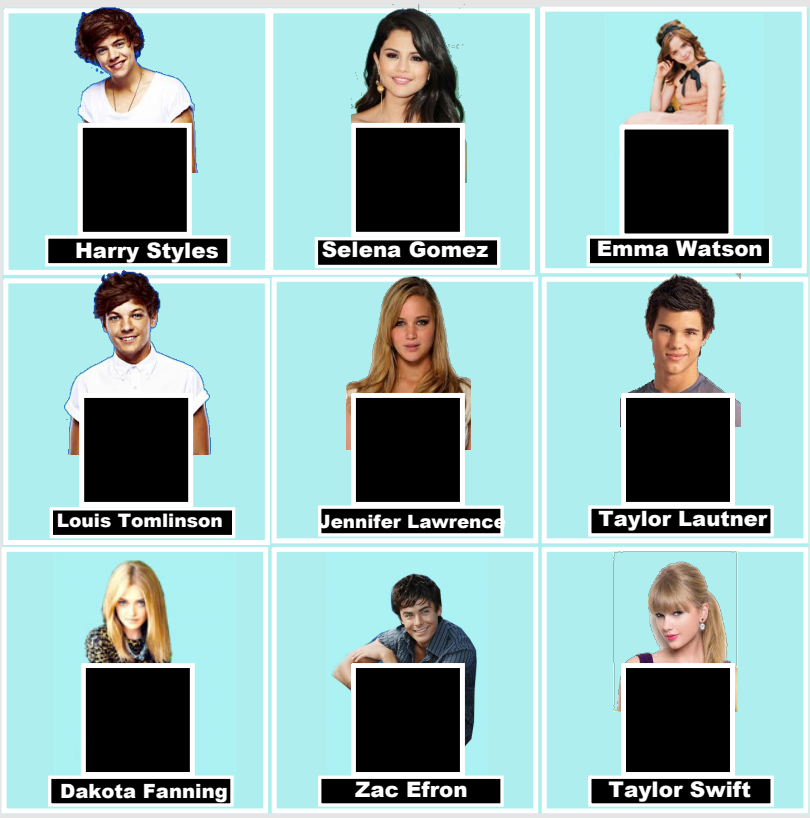
The Hollywood Squares

Player 1

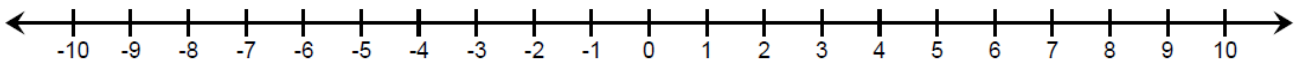
X

Player 2

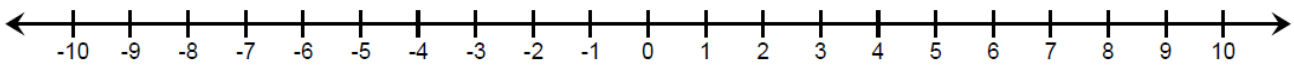
O



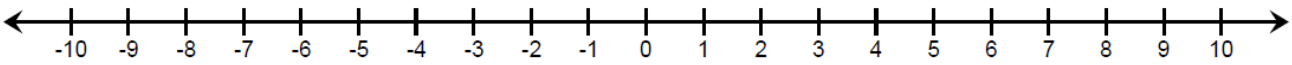
$$2x + 8 \leq 16$$



$$-5+3x<22$$

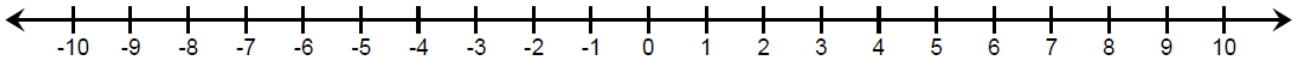


$$\frac{4}{3}x - 2 > -6$$

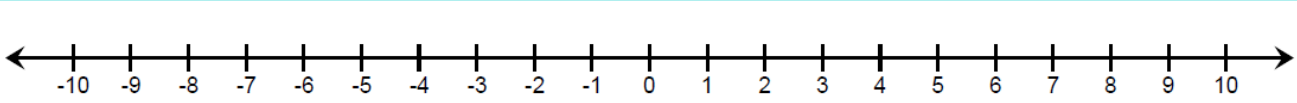


$$\frac{3}{5}x - 4 \geq -1$$

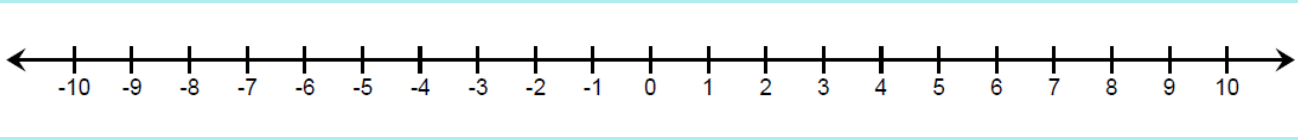
$$2x - 6 > 0$$



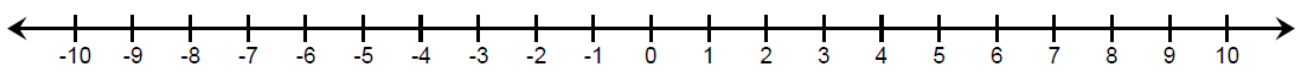
$$\frac{1}{3}x - 12 \leq -14$$



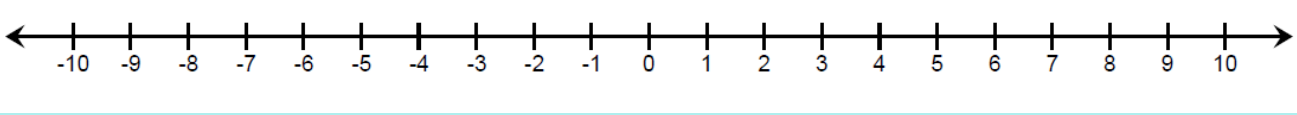
$$5x - 6 > -6$$



$$4x - 2 > -18$$



$$4x - 6 \leq 30$$



Summary

Table Discussion: What does the graph of an inequality represent?