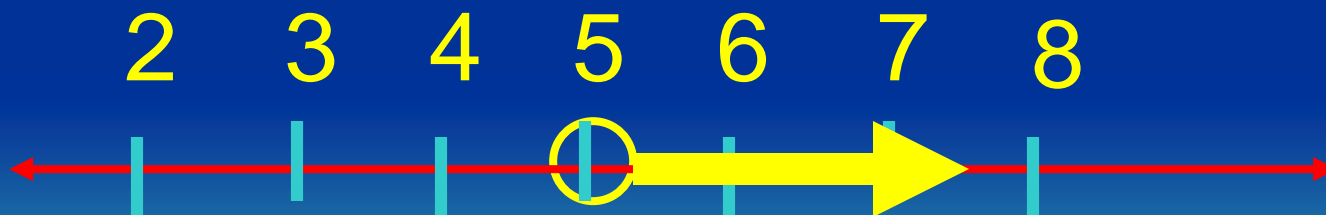


Inequalities and their Graphs

$$x > 5$$



Inequalities and their Graphs

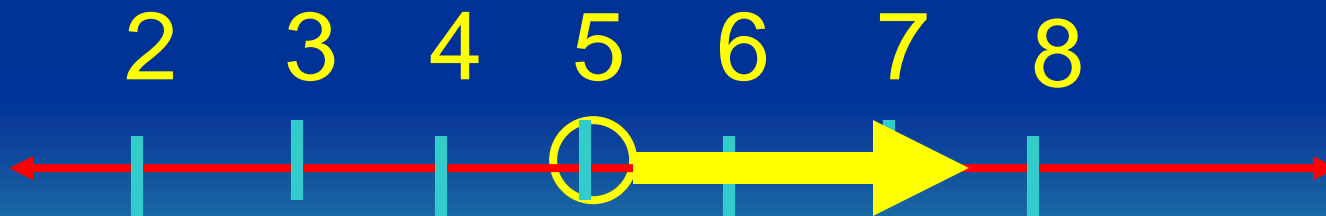
Objective: To write and graph simple inequalities with one variable



Inequalities and their Graphs

What is a good definition for Inequality?

An inequality is a statement that two expressions are not equal



Inequalities and their Graphs

Terms you see and need to know
to graph inequalities correctly

$<$ less than



$>$ greater than



Notice
open
circles

Inequalities and their Graphs

Terms you see and need to know
to graph inequalities correctly

\leq less than or equal to



\geq greater than or equal to



Notice colored in circles

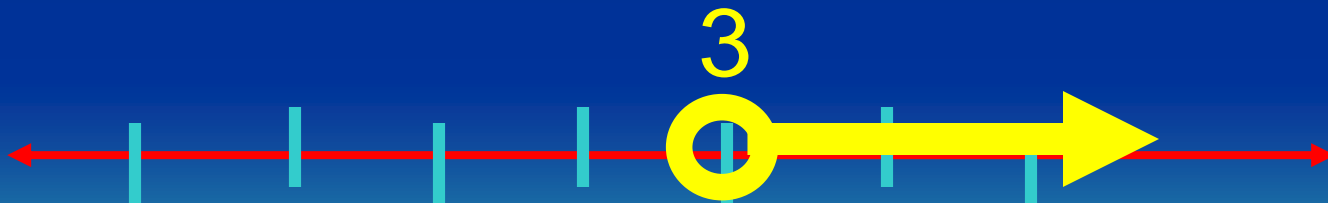


Inequalities and their Graphs

Let's work a few together

Notice: when variable is on left side, sign shows direction of solution

$$x > 3$$

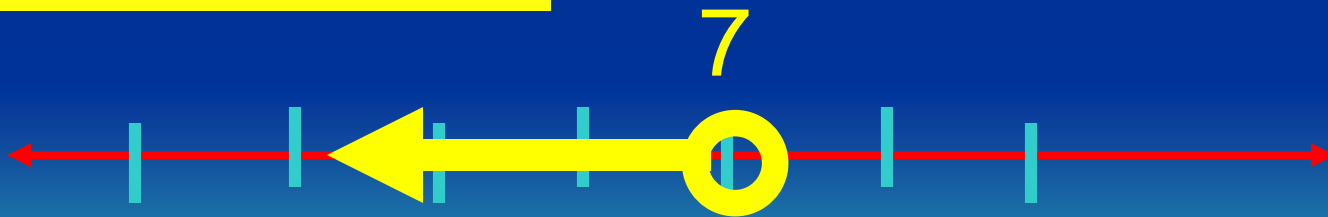


Inequalities and their Graphs

Let's work a few together

$$x < 7$$

Notice: when variable is on left side, sign shows direction of solution

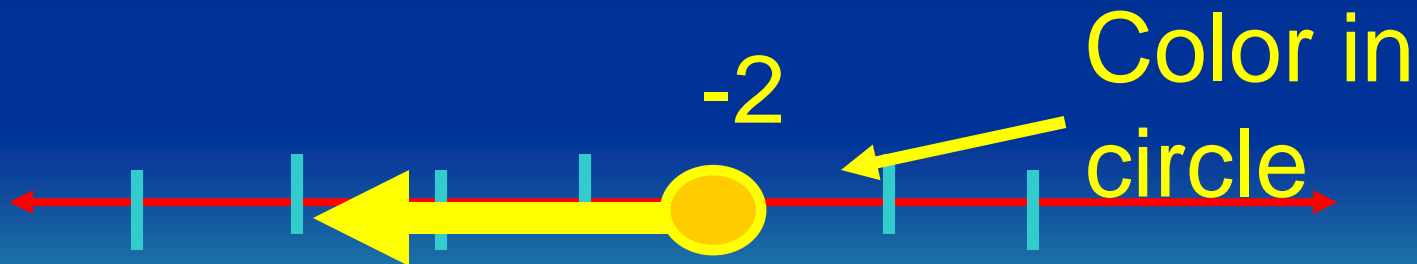


Inequalities and their Graphs

Let's work a few together

$$p \leq -2$$

Notice: when variable is on left side, sign shows direction of solution



Inequalities and their Graphs

Let's work a few together

Notice: when variable is on left side, sign shows direction of solution

$$x \geq 8$$

8

Color in circle



Try this one on your own

$$x > 12$$



12

n your Own

$$s < 12$$



12

On your Own

$$m \geq 2$$



2



Answer 1 through 5

1.

$$b \leq -6$$

On your Own

2.

$$x > 10$$

On your Own

3.

$$p > -15$$

On your Own

4.

$$g \geq 25$$

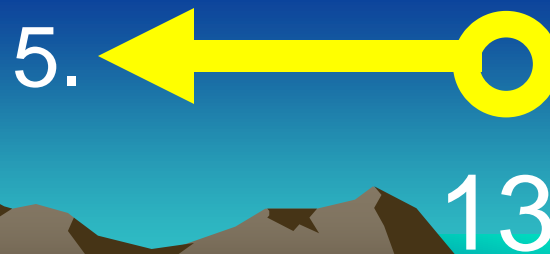
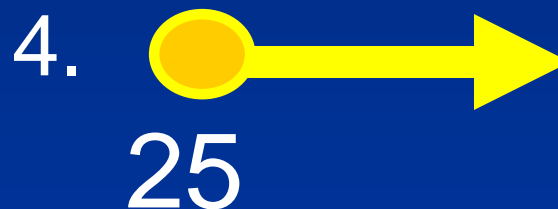
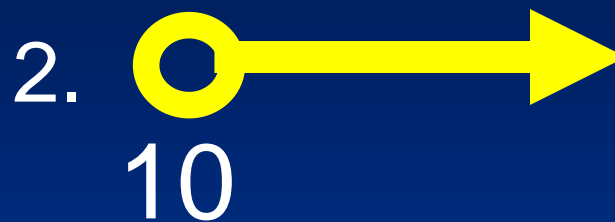
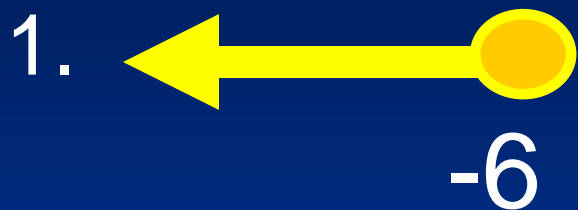
On your Own

5.

$$x < 13$$



Answers: 1 through 5



Answer 6 through 10

6.

$$b \leq -7$$

On your Own

7.

a > 8

On your Own

8.

$$q \geq -5$$

On your Own

9.

$$S < 14$$

On your Own

10.

$$m \geq 8$$



Answers: 6 through 10

6.



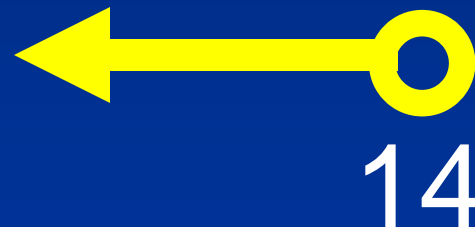
7.



8.



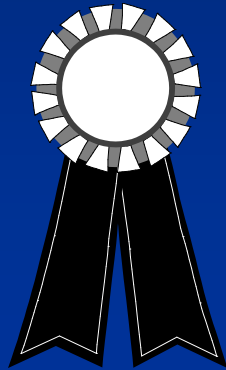
9.



10.



Graphing Inequalities



Excellent Job !!! Well Done