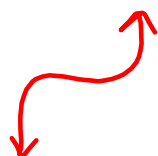


Happy Monday, October 24!

Do Now:

What is the end behavior of the following?



$$f(x) = \underline{3}x^{\textcircled{3}} - 2x + 1$$

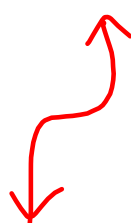
(Hint, think "to the right" and "to the left")

L  
down

R  
up

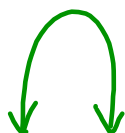
Oct 23-8:45 PM

$$y = 6x^7 - 5x^2 + 1$$



L      R  
Down    up

$$y = \underline{-2}x^{\textcircled{4}} + 6x - 6$$



Oct 24-11:27 AM

## Homework Summary and Questions:

$$y = -2x^5 - 7x + 1$$

	Neg lead coef	Pos lead coef
<u>Odd Degree</u>		
<u>Even Degree</u>		

$$y = -3x^{10} + 7x^2 - x + 3$$

Oct 23-8:50 PM

## Formative Quiz on Wednesday

However, if you receive a 4, you do not need to take the summative next Monday.

On the quiz, you will sketch graphs based on their end behavior, zeros, and give domain and range.

**NO CALCULATORS.**

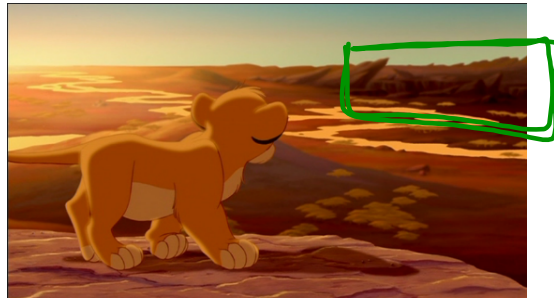
Oct 23-8:50 PM

So what don't we know?

dominant  
place ("this is my domain")

# Domain and Range

shooting range

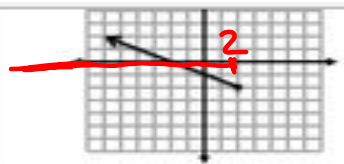
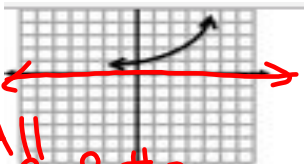


Oct 23-8:53 PM

Domain →

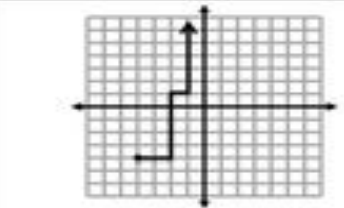
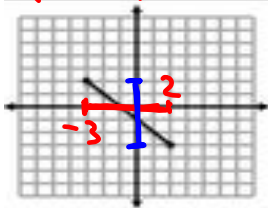
X-axis

$(-\infty, \infty)$  All Real #s

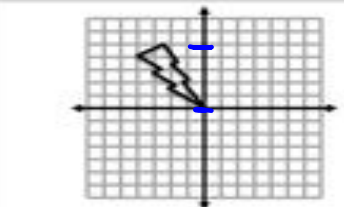
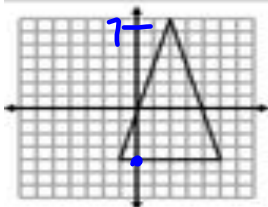


$x \leq 2$

$-3 \leq x \leq 2$



Range  
Y-axis

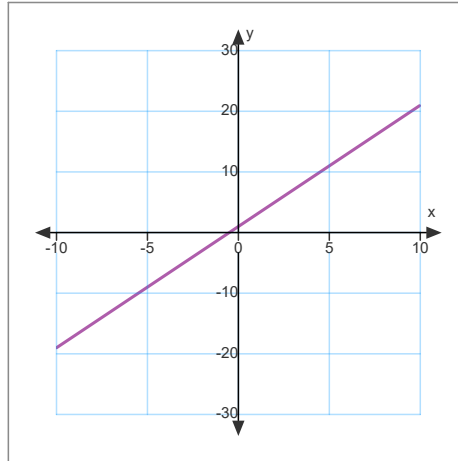


Range  
 $0 \leq x \leq 5$

$-4 \leq x \leq 7$

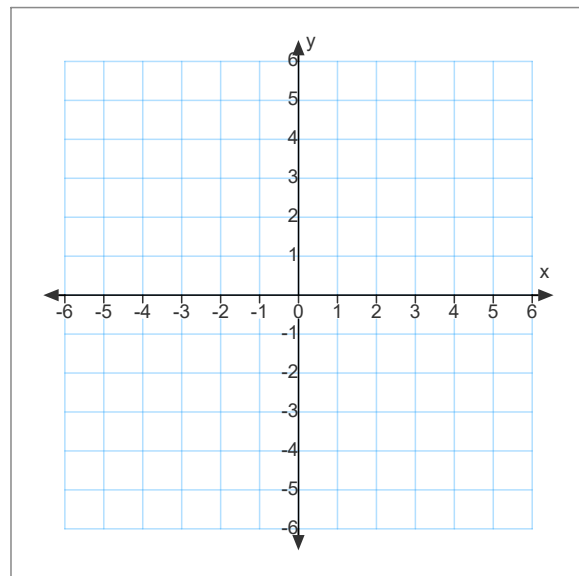
Oct 24-11:14 AM

$$y = 2x + 1$$



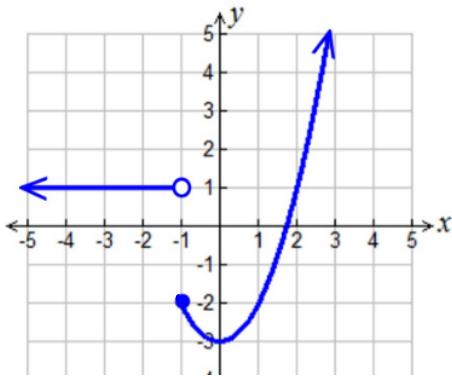
Oct 24-9:30 AM

How do we read inequalities?



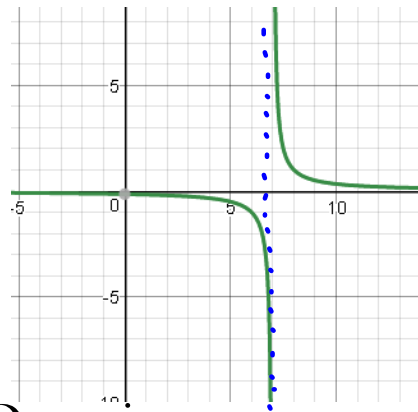
Oct 24-8:16 AM

Domain refers to the **x-axis**



Domain:

All reals  
 $(-\infty, \infty)$

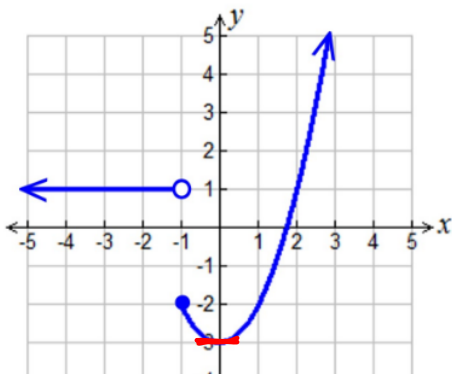


Domain:

All real numbers  
 except 7

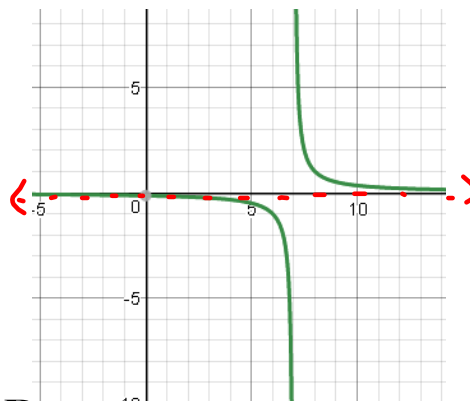
Oct 23-8:55 PM

Range refers to the **y-axis**



Range:

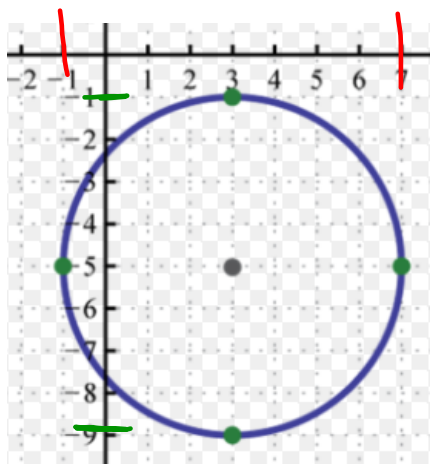
$x \geq -3$



Range:

All reals  
 except zero

Oct 23-8:55 PM



Domain:

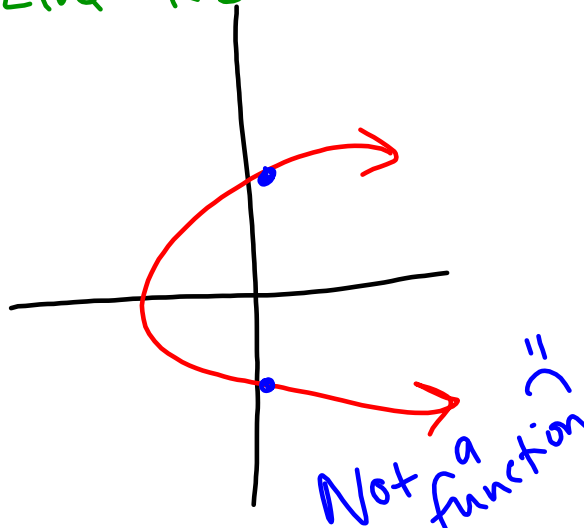
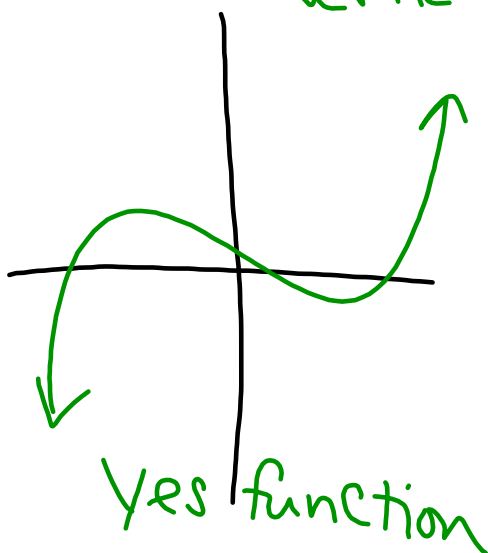
$$-1 \leq x \leq 7$$

Range:

$$-9 \leq y \leq -1$$

Oct 24-8:20 AM

### Vertical Line Test



Oct 24-11:44 AM

## Matching Activity

Use the graphs provided and the descriptions of the domain/range to match the graphs.

Oct 24-9:31 AM

Exit Slip:

Domain refers to which axis?

Range refers to which axis?

Homework: Finish Matching Activity

Oct 24-9:32 AM