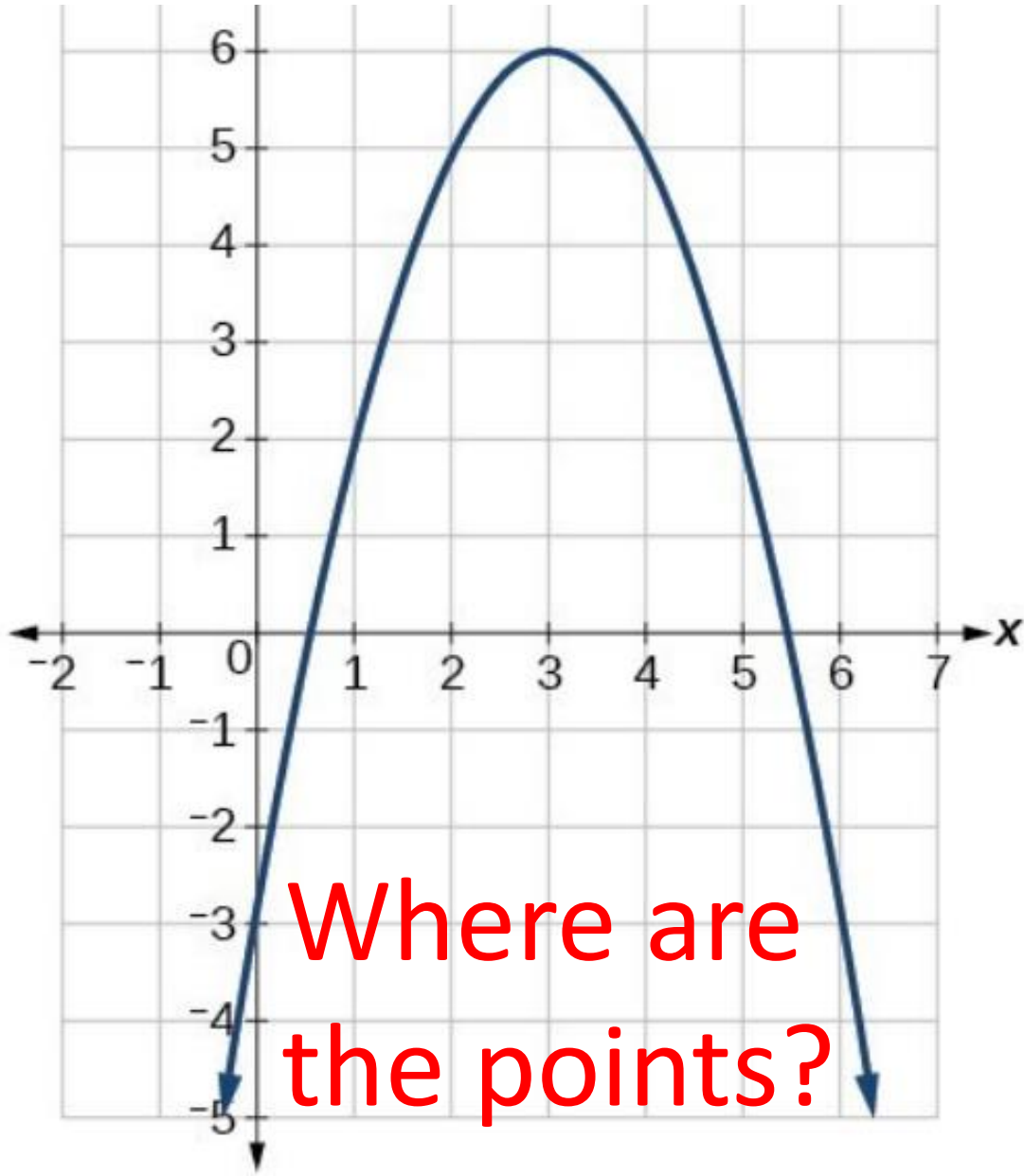


# Activator



Evaluate the function.

$$f(0) = \frac{-3}{1}$$

$$f(1) = \frac{2}{1}$$

$$f(3) = \frac{6}{1}$$

$$f(4) = \frac{5}{1}$$

$$f(6) = \frac{-3}{1}$$

Page #17  
Lesson 3.5

What is the  
Maximum  
(top)?

(3, 6)

# Today's Objective

## Lesson 3.5

Students will be able to determine the domain and range of a function.





# Today's New Vocab (1 of 4)

Can two inequalities be put together?

$$x \geq -6 \quad x \leq 2$$

greater  
than -6

less  
than 2

Yes

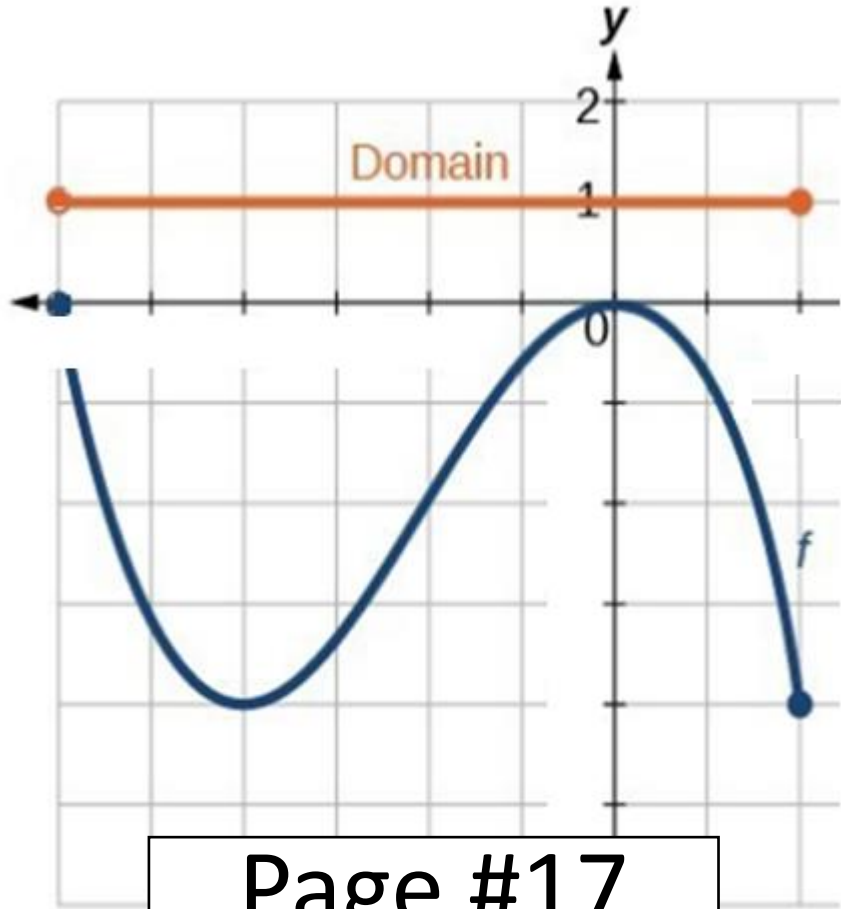
It means "in between"

$$-6 \leq x \leq 2$$

X is in between  
-6 and 2.

# Today's New Vocab (2 of 4)

What is the **Domain** of the function?



Page #17  
Lesson 3.5

**Domain** means “how wide”

**Domain** means only X values

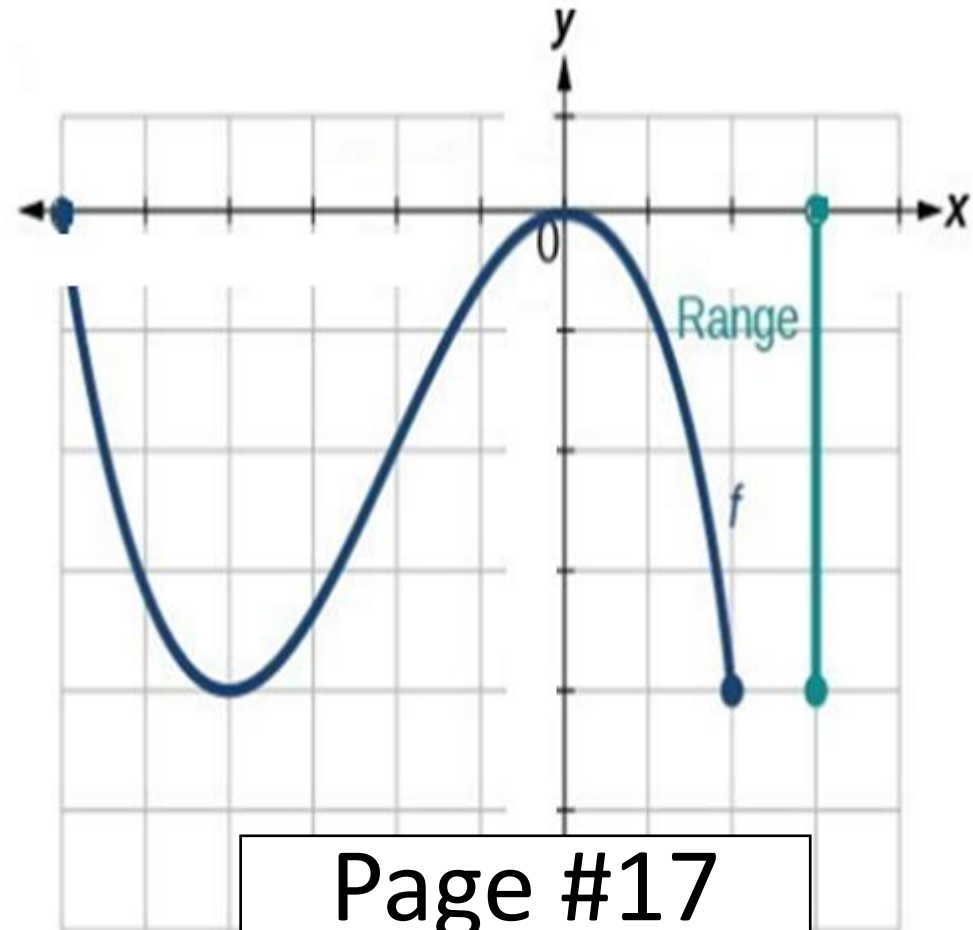
This is a compound inequality  
which means “in between”

$$\underline{-6} \leq x \leq \underline{2}$$

Left Most **is in** Right Most  
**(-6,0) between (2,-4)**

# Today's New Vocab (3 of 4)

What is the **Range** of the function?



Page #17  
Lesson 3.5

**Range** means “how Tall”

**Range** means only Y values

This is a compound inequality  
which means “in between”

$$\underline{-4} \leq y \leq \underline{0}$$

Lowest **is in** Highest

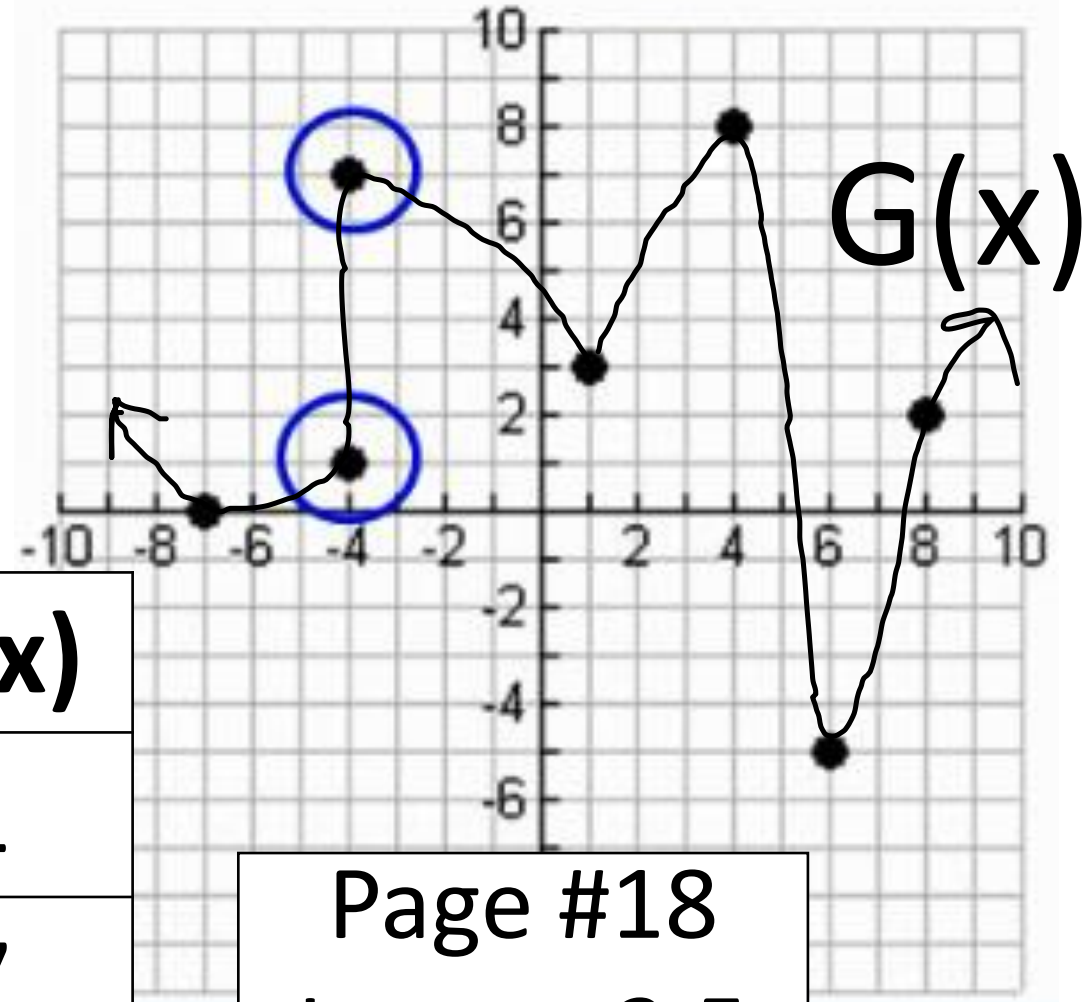
**(-4, -4) between (0, 0)**

# Today's New Vocab (4 of 4)

Determine if the graph is a function. No, it is NOT

Write the coordinates of the circled points.

$(-4, 1)$  and  $(-4, 7)$



It is NOT a function.

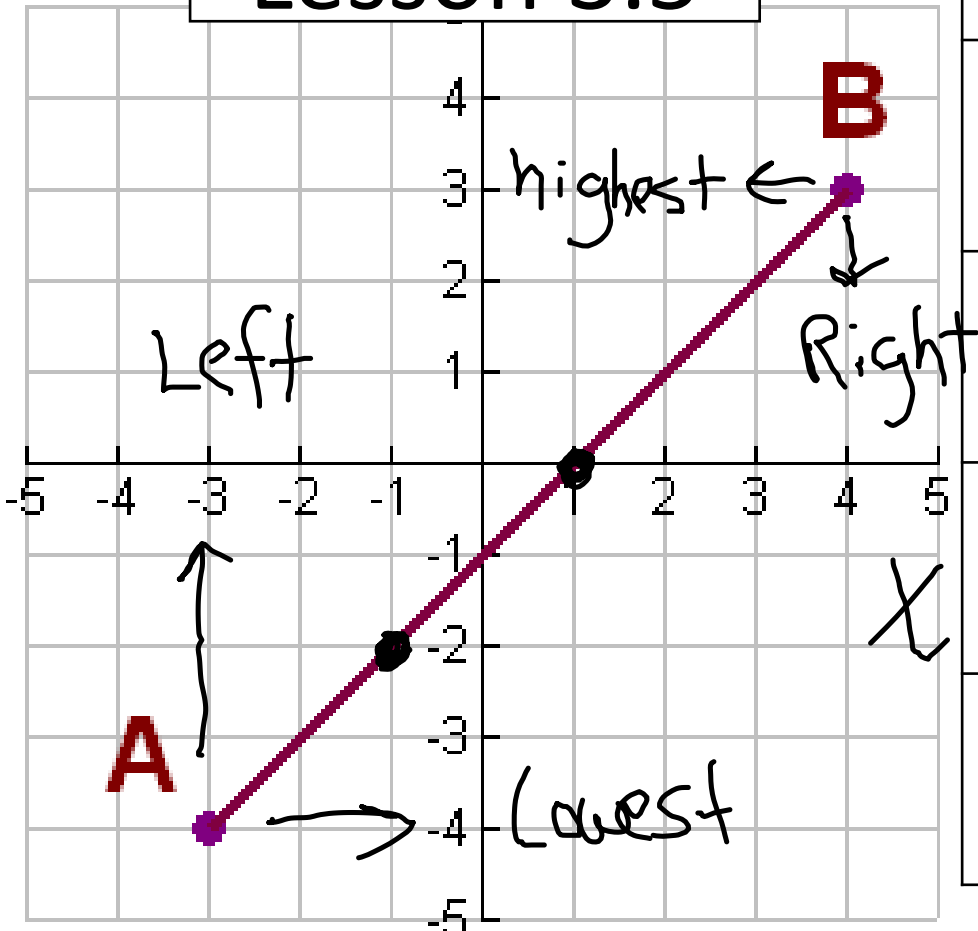
**Why?** The input  $x = -4$  is repeated.

$x$	$G(x)$
-4	1
-4	7

# Work Period

What is the **domain(x)** and **range(y)** of the function?

Page #19  
Lesson 3.5



x	f(x)
-3	-4
-1	-2
1	0
4	3

$$\underline{-3} \leq x \leq \underline{4}$$

Left most      Right most  
(-3, -4)      (4, 3)

$$\underline{-4} \leq y \leq \underline{3}$$

lowest      highest  
(-3, -4)      (4, 3)



# Group Work Questions

Pages 20-19  
Lesson 3.5

## Do page 20 FIRST

Directions: All groups, please do all of the questions. Use your notes from last class to help you. [Ask 2 people before you ask me.]

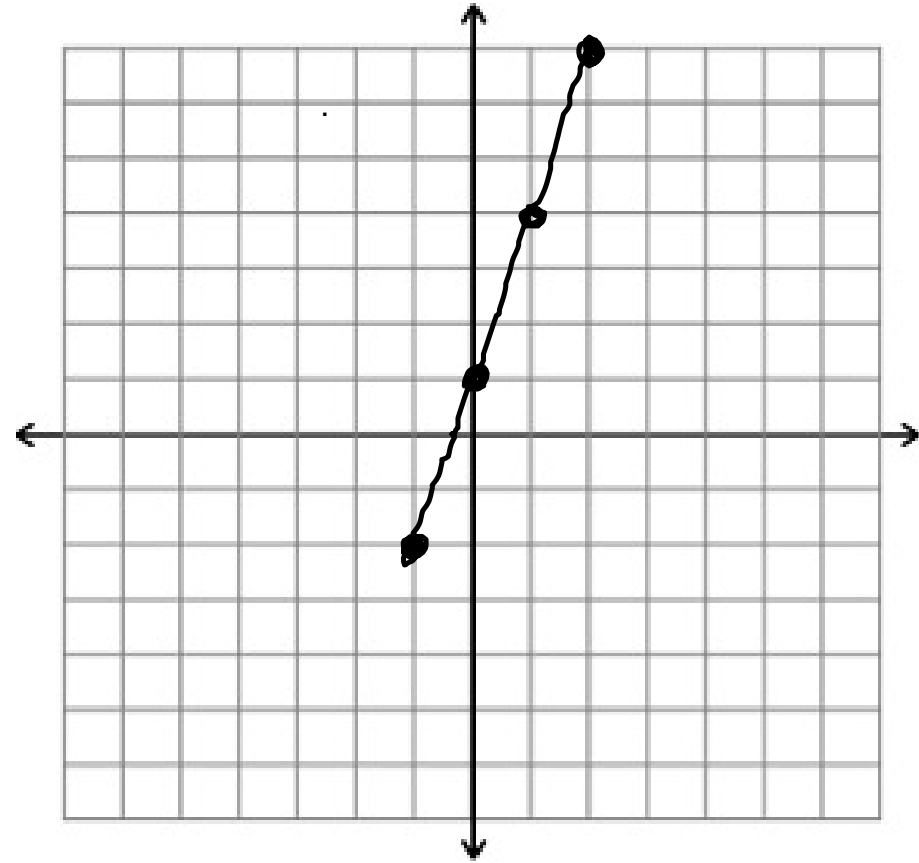
Last time, we did Lesson 3.5 Notes.

2<sup>nd</sup> Stop @ 9:03    3<sup>rd</sup> Stop @ 10:06    8<sup>th</sup> Stop @ 2:20

\*One person from each group will present one question.

# Exit Ticket

What is the **domain(x)** and **range(y)** of the function?



x	y
-1	-2
0	1
1	4
2	7

-1  $\leq$   $x \leq$  2  
Left most      Right most

-2  $\leq$   $y \leq$  7  
lowest      Highest