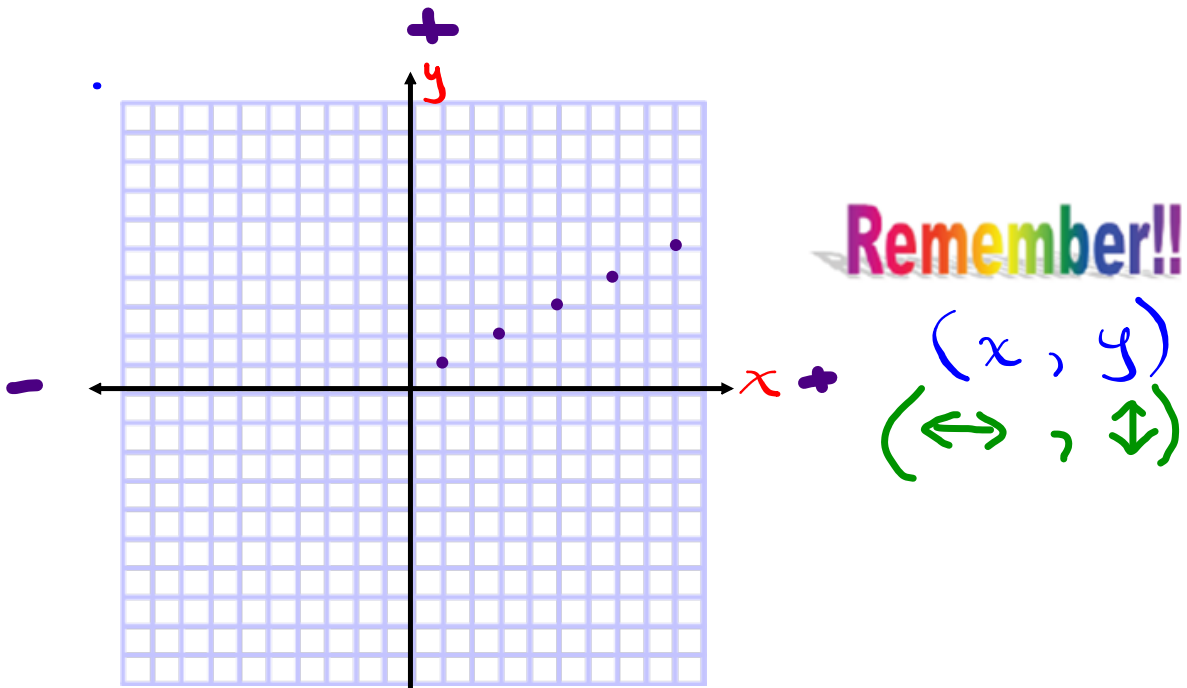


<b>Domain</b>	The first set of elements: {
<b>Range</b>	The second set of elements: {



Ordered Pairs:

$$\left\{ \begin{array}{cccccc} \text{1st} & \text{2nd} & \text{1st} & \text{2nd} & \text{1st} & \text{2nd} & \text{1st} & \text{2nd} & \text{1st} & \text{2nd} \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ (1,1), & (3,2), & (5,3), & (7,4), & (9,5) \end{array} \right\}$$

**Domain**

The set of first elements:

**Range**

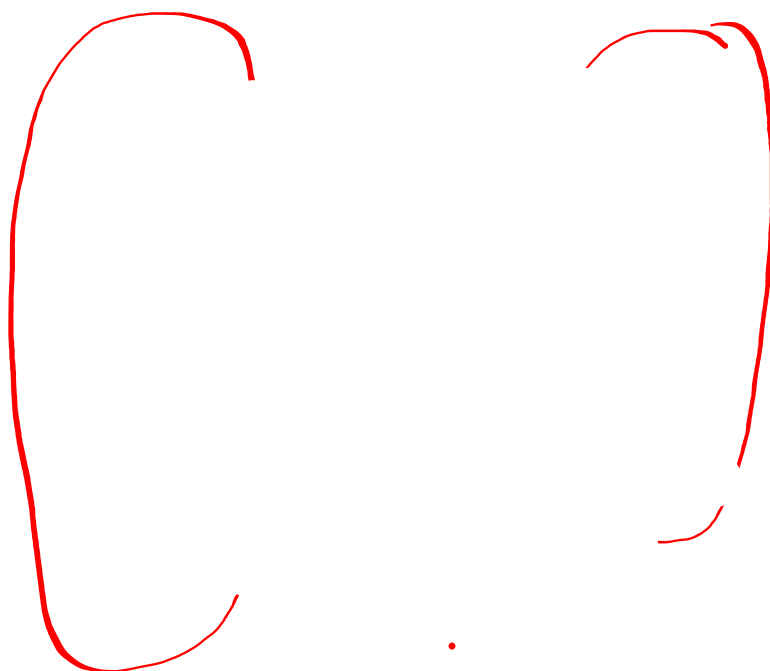
The set of second elements:

$$\{(2, 2), (1, 2), (-3, 5), (-2, 1), (5, 8)\}$$

State Domain & Range  
Don't Repeat #

$$\text{Domain}^x : \{-3, -2, 1, 2, 5\}$$

$$\text{Range}^y : \{1, 2, 5, 8\}$$





How do you state the range?

When connected lines

$$\{y \mid y \leq 5, y \in \mathbb{R}\}$$

$$\{y \mid -5 \leq y \leq 8, y \in \mathbb{I}\}$$

How to write Range

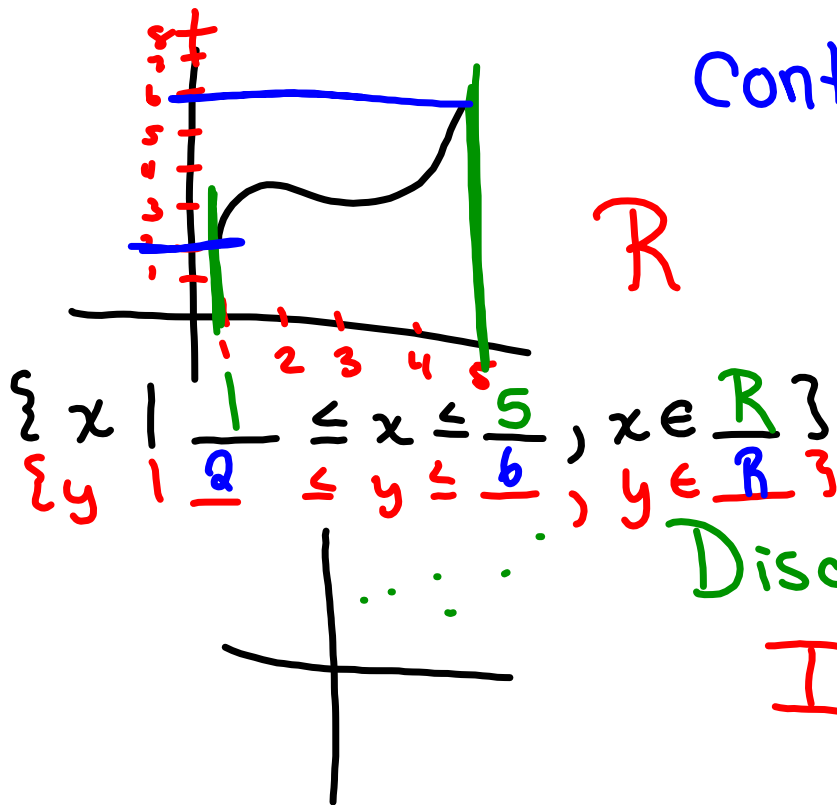
$$\{y \mid \boxed{\phantom{0}} \leq y \leq \boxed{\phantom{0}}, y \in \boxed{\phantom{0}}\}$$

*Smallest (low)* (above left box), *(high) largest* (above right box), *R connect* (above right side), *I dots y* (above right side), *I* (below right side)

How to write Domain ( $x$ )  $\leftrightarrow$

$$\{x \mid \boxed{\phantom{0}} \leq x \leq \boxed{\phantom{0}}, x \in \boxed{\phantom{0}}\}$$

*left* (above left box), *Right* (above right box)



Continuous data

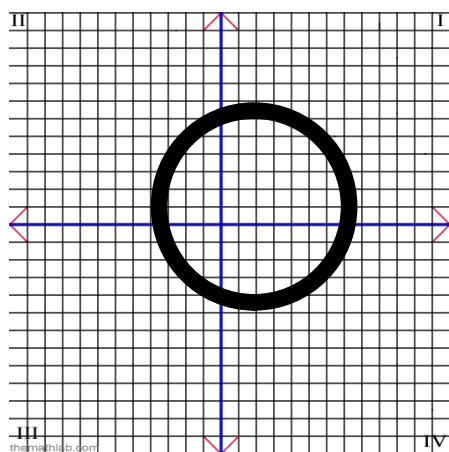
↓  
all points are connect

R

Discrete → Series of Dots

I

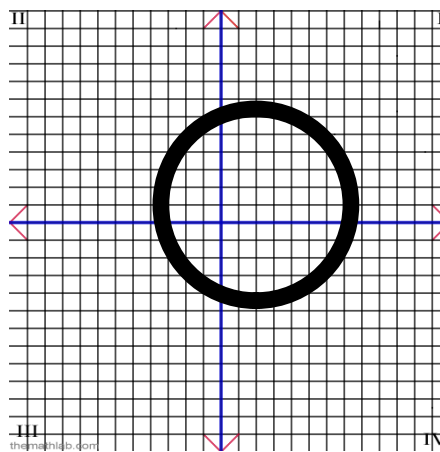
# Domain



The **domain** represents all the values of  $x$ .  $\leftrightarrow$

**X is the independent Variable**

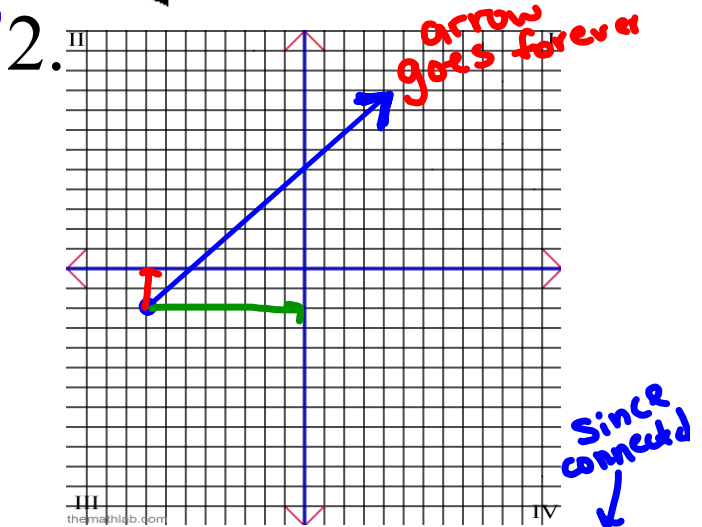
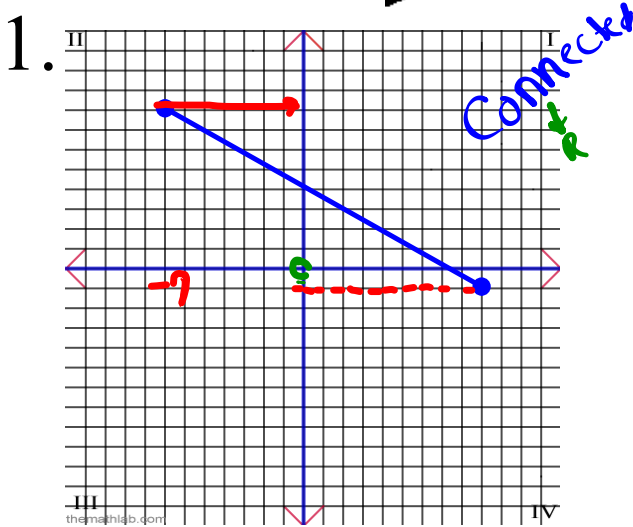
# Range



The **range** represents all the values of  $y$ .  $\updownarrow$

**Y is the dependent Variable**

# EXAMPLES!



$$\{x \mid -7 \leq x \leq 9, x \in \mathbb{R}\}$$

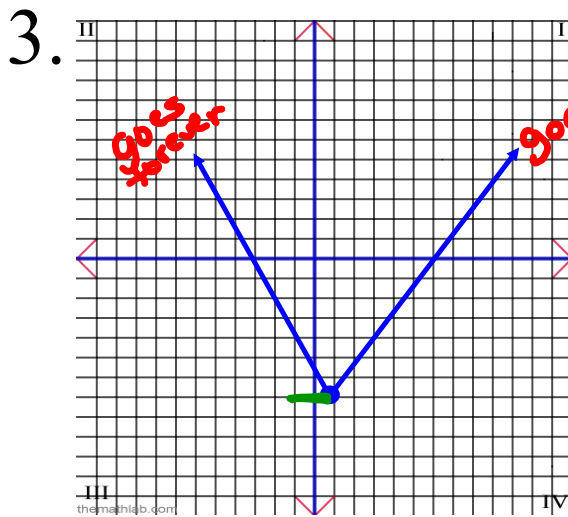
$$\{x \mid -8 \leq x, x \in \mathbb{R}\}$$

$$\{y \mid -1 \leq y \leq 8, y \in \mathbb{R}\}$$

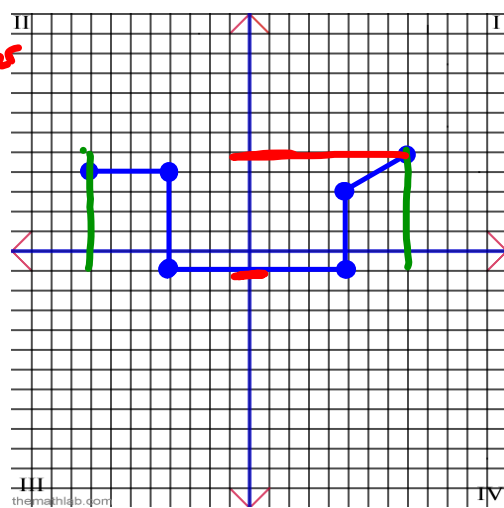
$$\{y \mid -2 \leq y, y \in \mathbb{R}\}$$



# EXAMPLES!



4



$$\{x \mid \quad, x \in \mathbb{R}\}$$

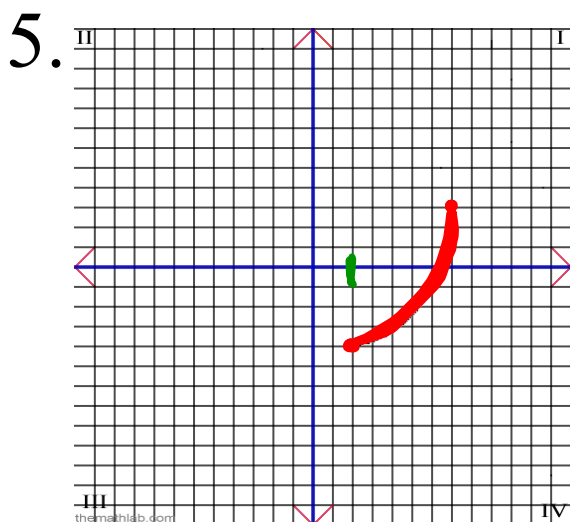
$$\{y \mid \underline{-7} \leq y \quad, y \in \mathbb{R}\}$$

$$\{x \mid \underline{-8} \leq x < \underline{8}, x \in \mathbb{R}\}$$

$$\{y \mid \underline{-1} \leq y \leq \underline{5}, y \in \mathbb{R}\}$$

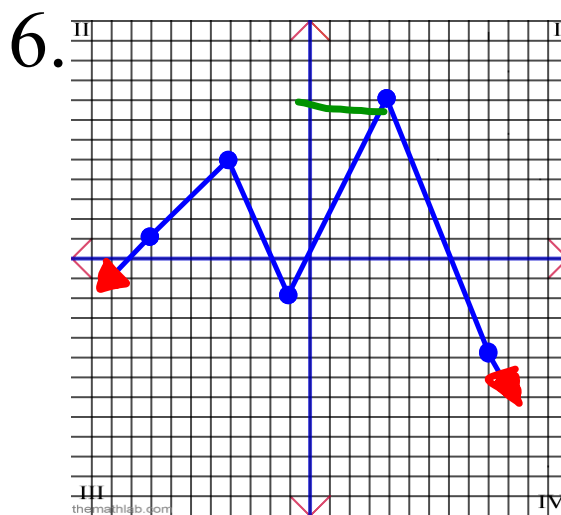


# EXAMPLES!



$$\{x \mid 2 \leq x \leq 7, x \in \mathbb{R}\}$$

$$\{y \mid -4 \leq y \leq 3, y \in \mathbb{R}\}$$

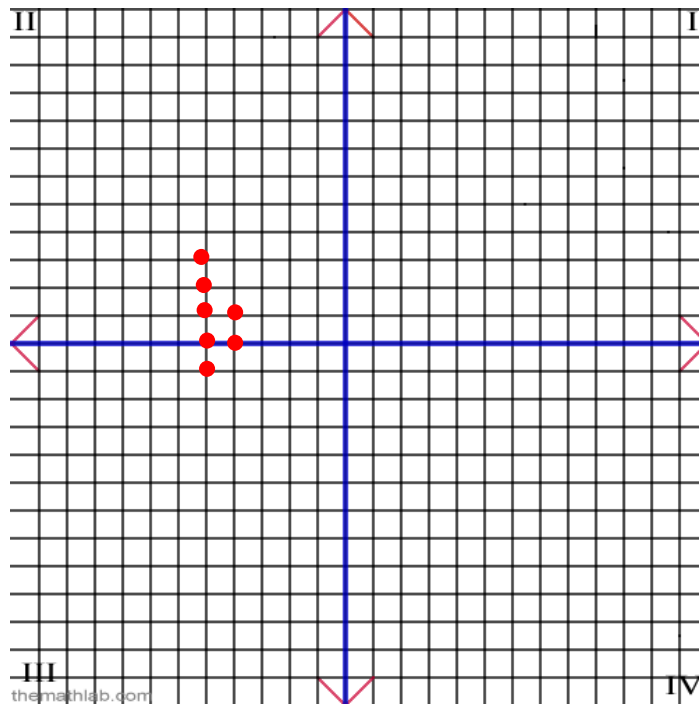


$$\{x \mid \dots, x \in \mathbb{R}\}$$

$$\{y \mid y \leq 4, y \in \mathbb{R}\}$$

# EXAMPLES!

7.



dots  $\rightarrow$  discrete  
Integers

$$\{x \mid -5 \leq x \leq -4, x \in \mathbb{I}\}$$

$$\{y \mid -1 \leq y \leq 3, y \in \mathbb{I}\}$$

## Homework

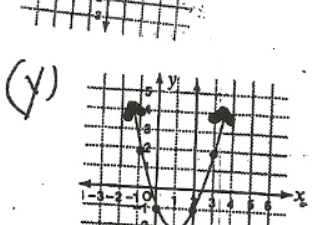
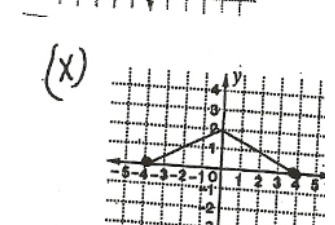
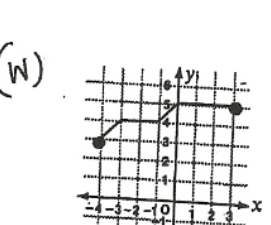
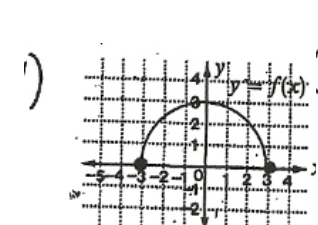
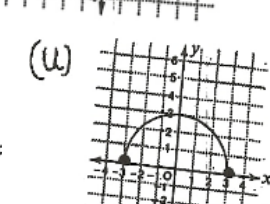
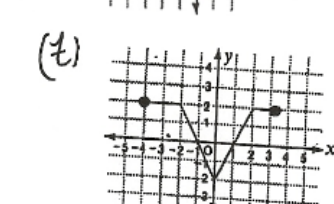
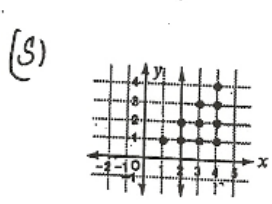
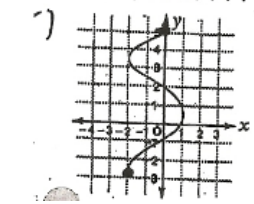
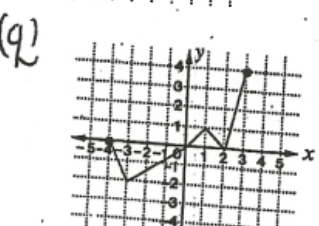
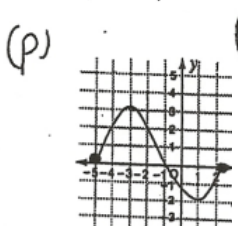
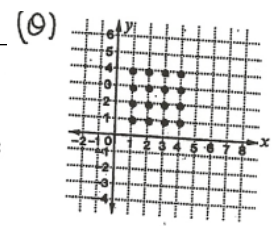
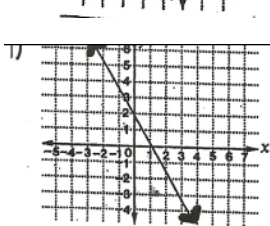
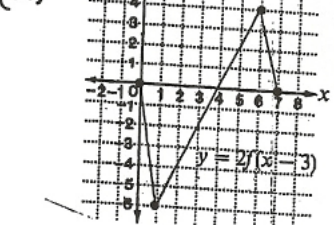
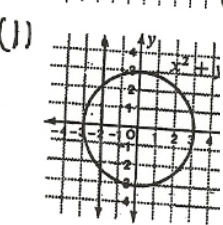
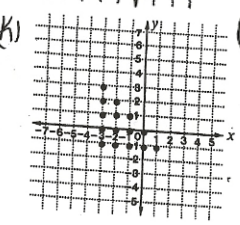
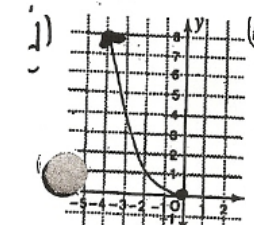
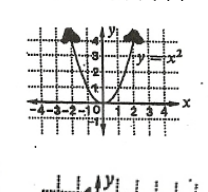
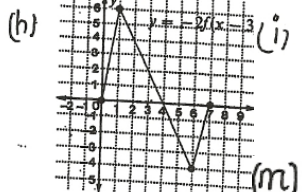
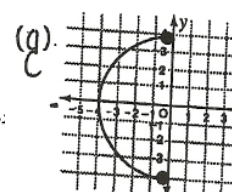
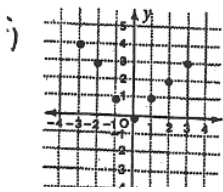
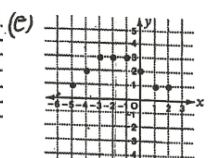
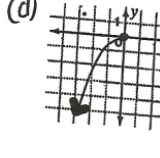
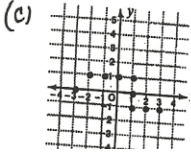
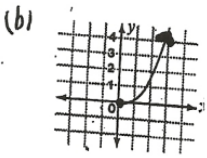
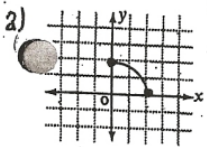
domain and range from graphs ( Worksheet 1)

$$\{x \mid \_ \leq x \leq \_, x \in \_ \}$$

$\mathbb{I} \rightarrow$  dots  
 $\mathbb{R} \rightarrow$  connected  
continuous

$$\{y \mid \_ \leq y \leq \_, y \in \_ \}$$

\* State the domain & range for each of the following (1)-(39)



## Attachments

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Domain & Range 1.doc