

To rent a car for less than one week from Ace Car Rentals, the cost is \$65.00 per day for the first three days, then \$60.00 a day for each additional day.

Number of Days Car Is Rented	Total Cost (\$)
1	65
2	130
3	195
4	255
5	315
6	375

a) Represent this relation as a set of ordered pairs.

b) State the domain & Range.

c) Is this relation a function?

Solution:

a) **First set represents the Number of days the car is rented.**
Second set represents the Total cost of renting the car.
{ (1, 65) , (2, 130) , (3, 195) , (4, 255) , (5 , 315) , (6, 375) }

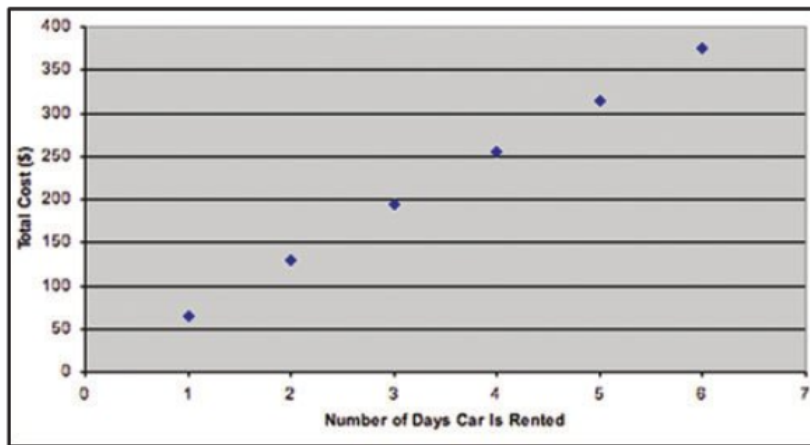
b) **Domain {1, 2, 3, 4, 5, 6}**
Range {65, 130, 195, 255, 315, 375}

c) **Function**



Compare the Graph with the Ordered Pairs!!

First set represents the number of days the car is rented.
Second set represents the total cost of renting the car.
{ (1, 65) , (2, 130) , (3, 195) , (4, 255) , (5, 315) , (6, 375) }



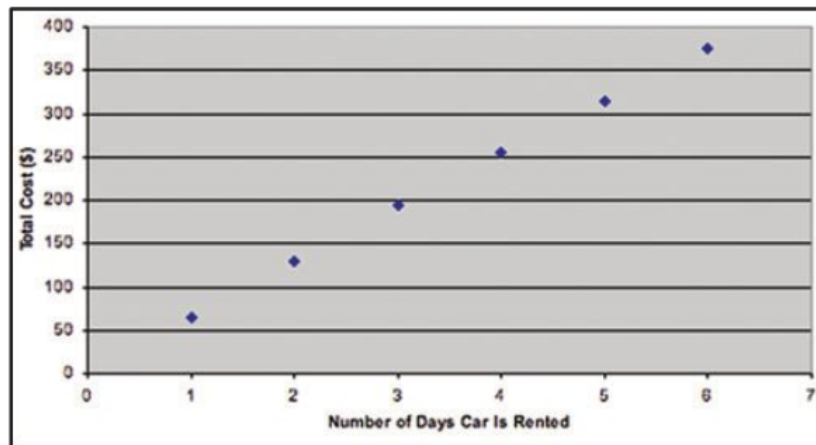
What do you notice?

They are the same as the points on the graph.

Take a look at Domain & Range!!

Domain {1, 2, 3, 4, 5, 6}

Range {65, 130, 195, 255, 315, 375}



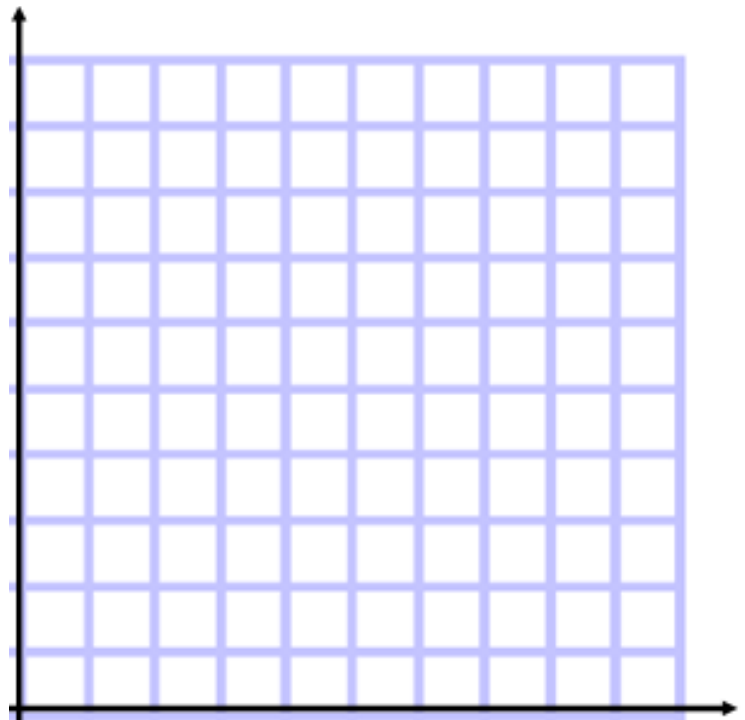
What do you notice?

Domain : represents the values of x (limits on x)

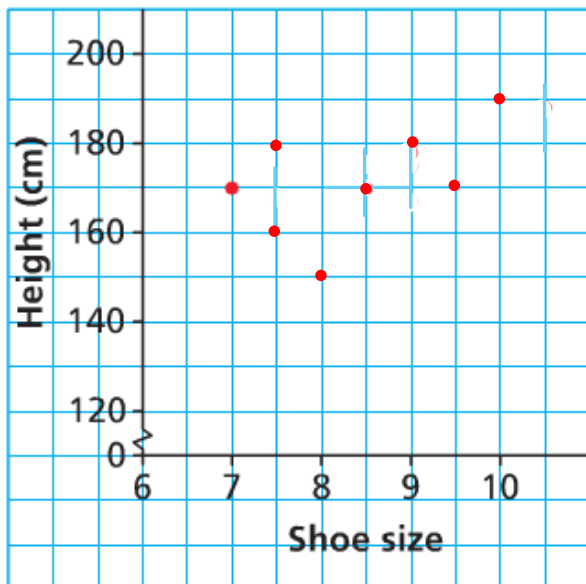
Range: represents the values of y (limits on y)

Graph the Following Relation

Number of Cans of Juice Purchased, n	Cost, C (\$)
1	2.39
2	4.00
3	6.39
4	8.00
5	10.39
6	12.00

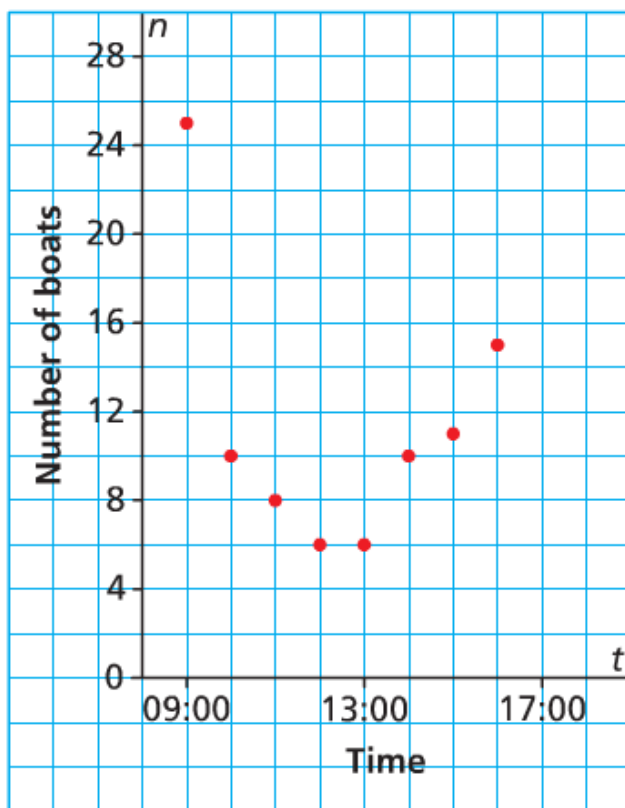


Height against Shoe Size

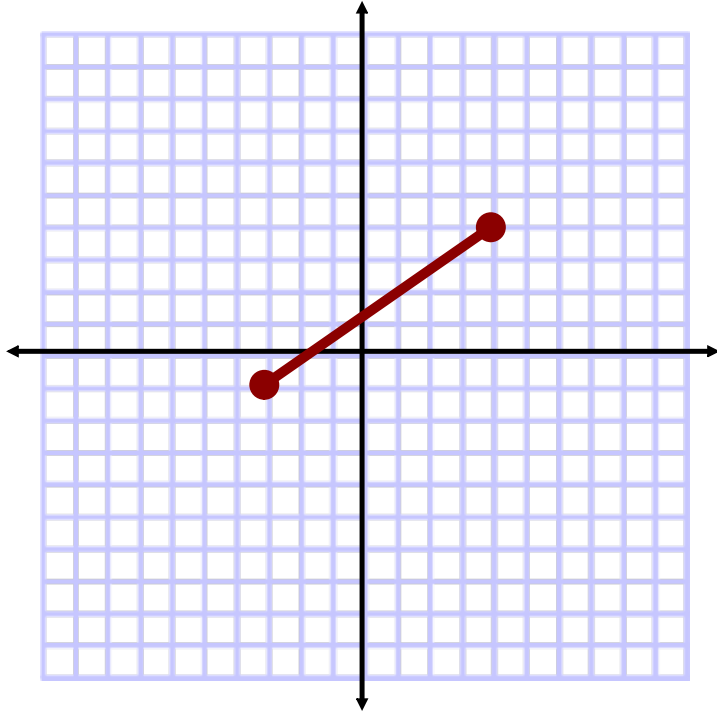


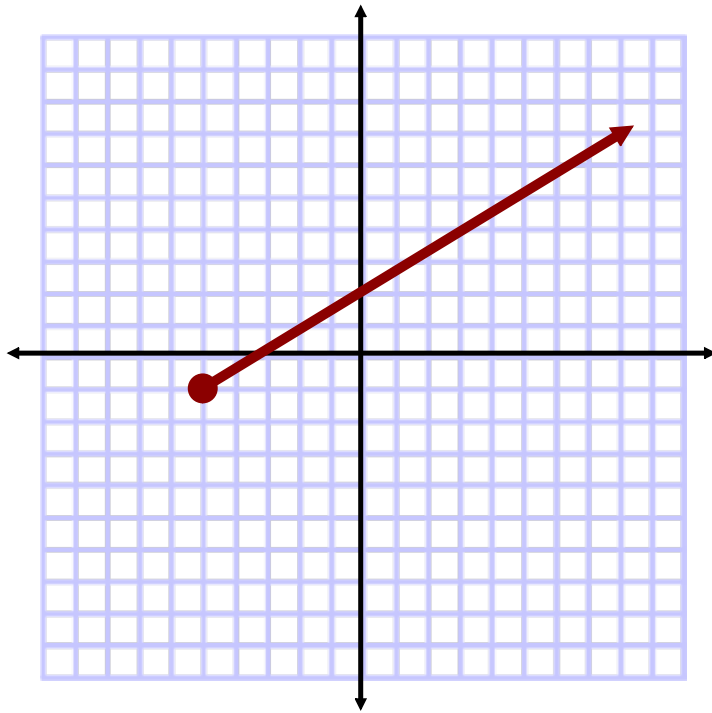
- State the domain & range.
- Is this relation a function?
- Why are the points not connected? Explain.

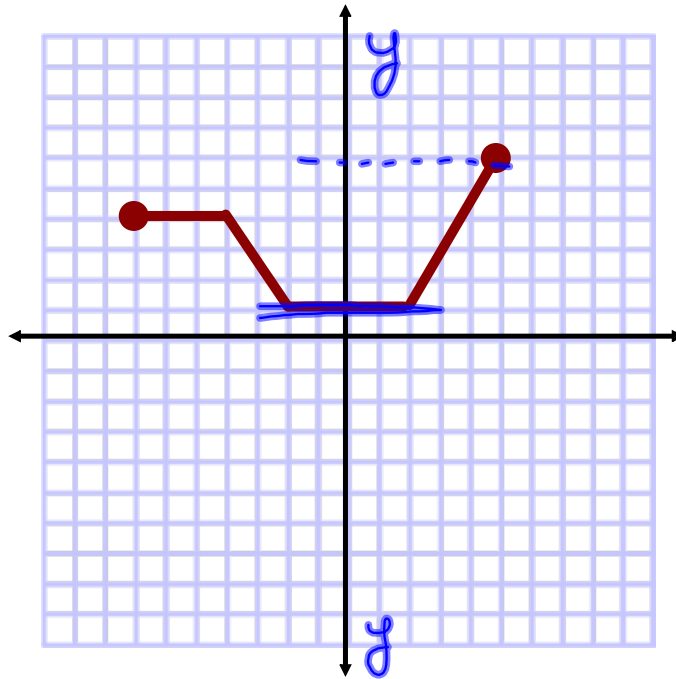
**Number of Fishing Boats
Anchored in an Inlet**



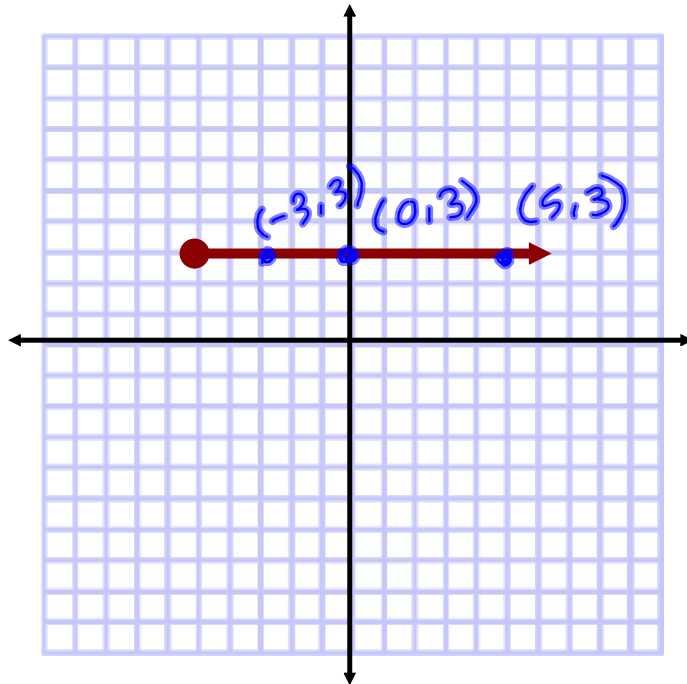
- a) **State the domain & range.**
- b) **Is this relation a function**
- c) **Why are the points not connected? Explain**





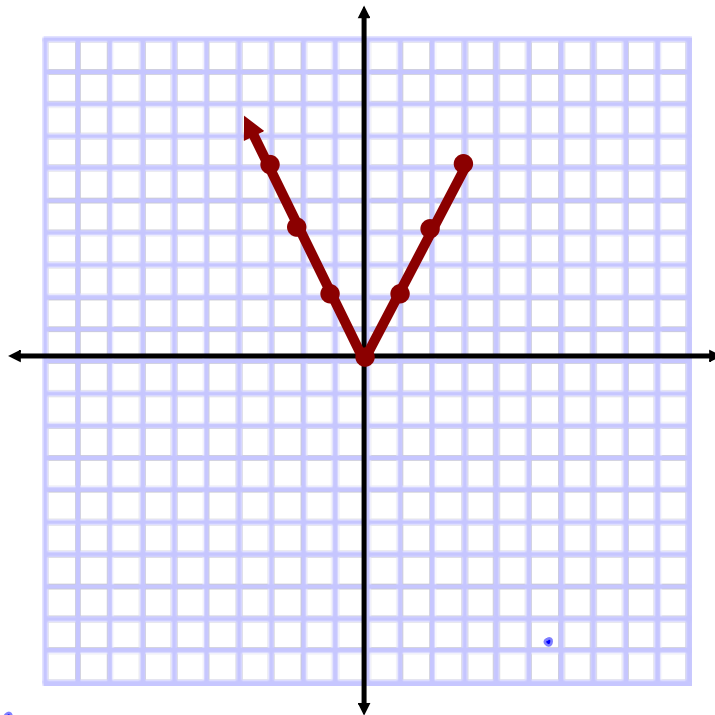


Domain: $-7 \leq x \leq 5, x \in \mathbb{R}$
Range: $y \leq 6, y \in \mathbb{R}$



Domain: $-5 \leq x$
 $x \geq -5, x \in \mathbb{R}$

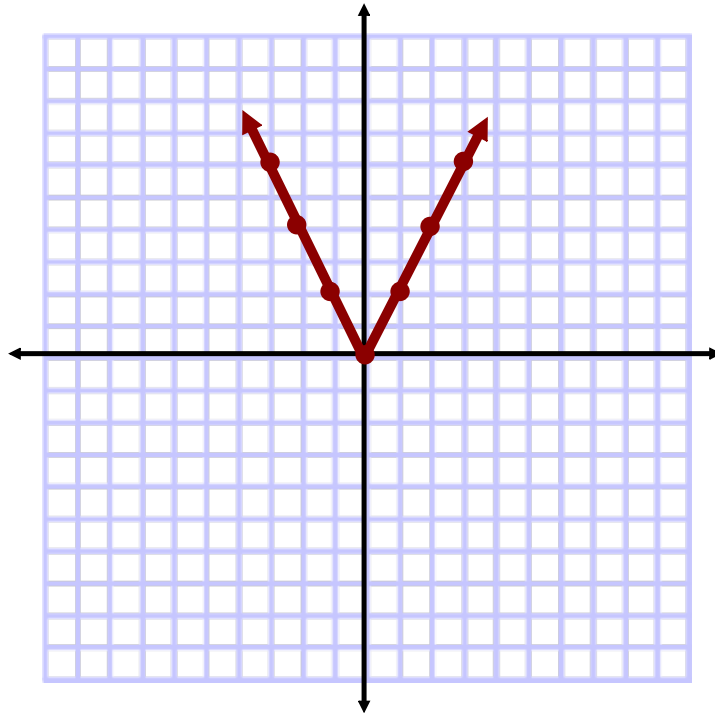
Range: $y = 3, y \in \mathbb{R}$



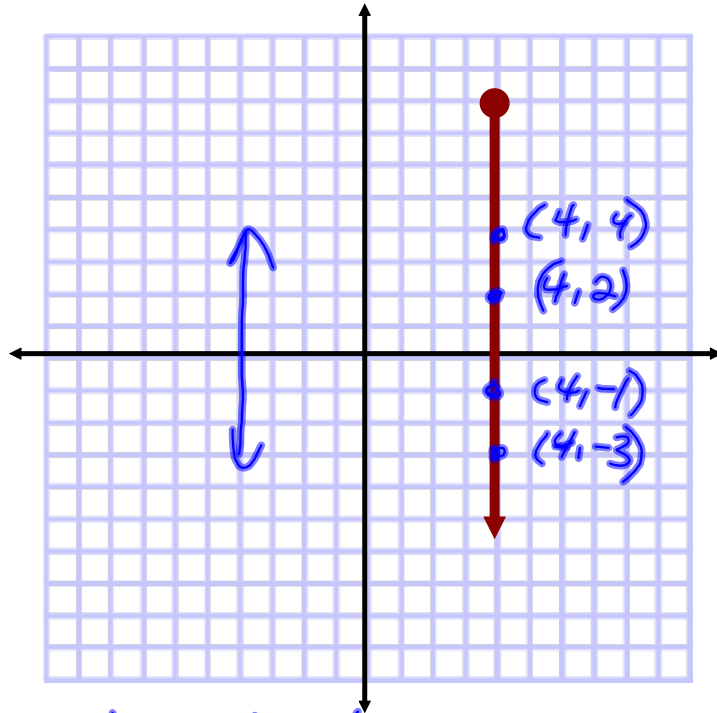
Domain:

$$x \leq 3, x \in \mathbb{R}$$

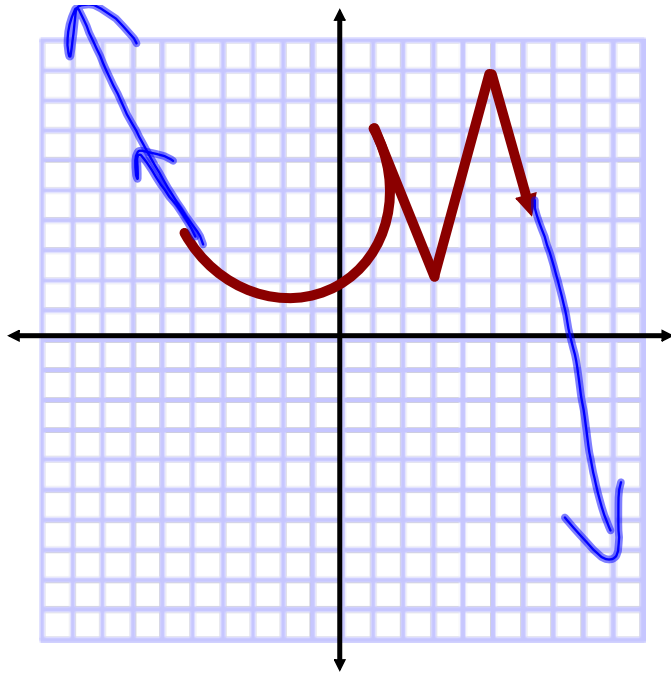
$$0 \leq y$$
$$y \geq 0, y \in \mathbb{R}$$

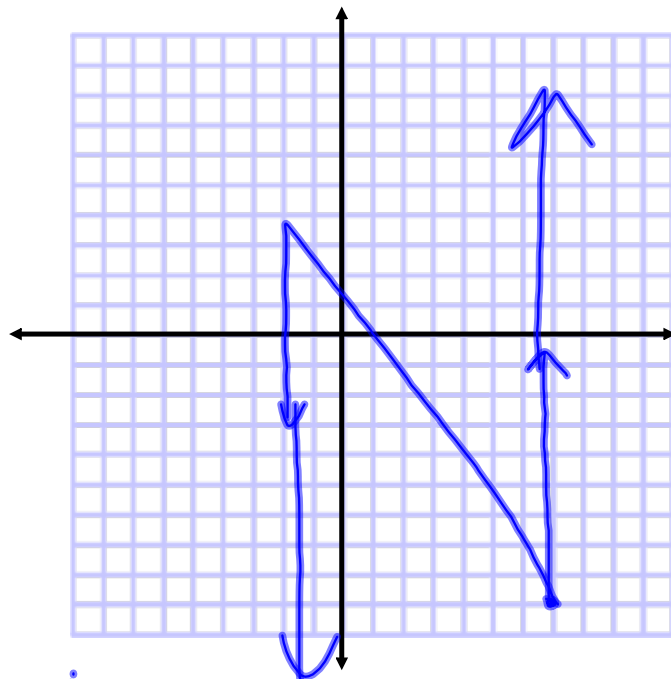


Domain: $x \in \mathbb{R}$
Range: $0 \leq y$
 $x \rightarrow 0, y \in \mathbb{R}$

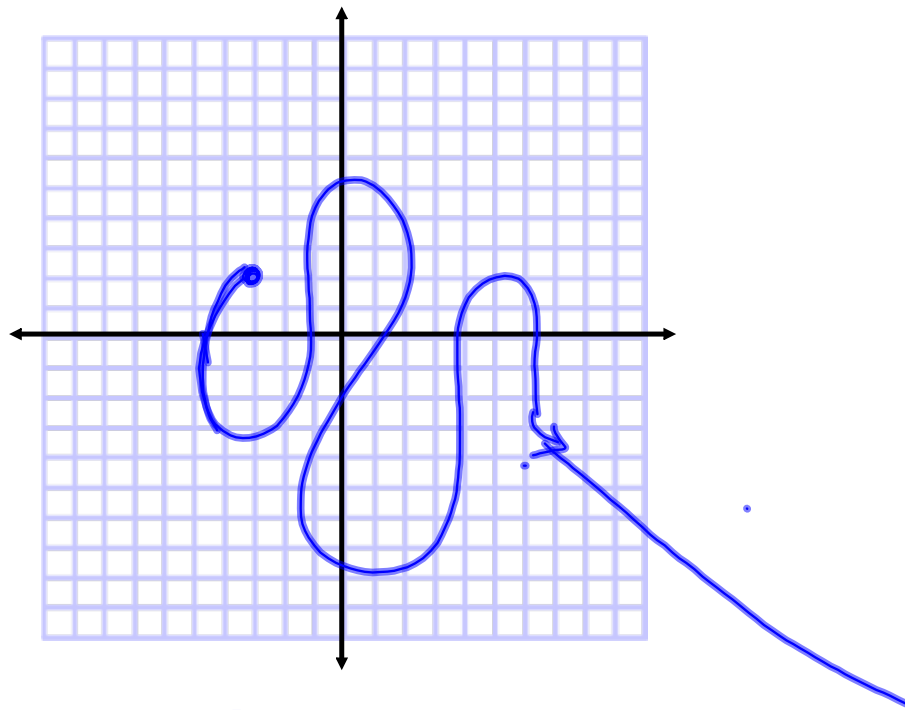


Domain $x=4$

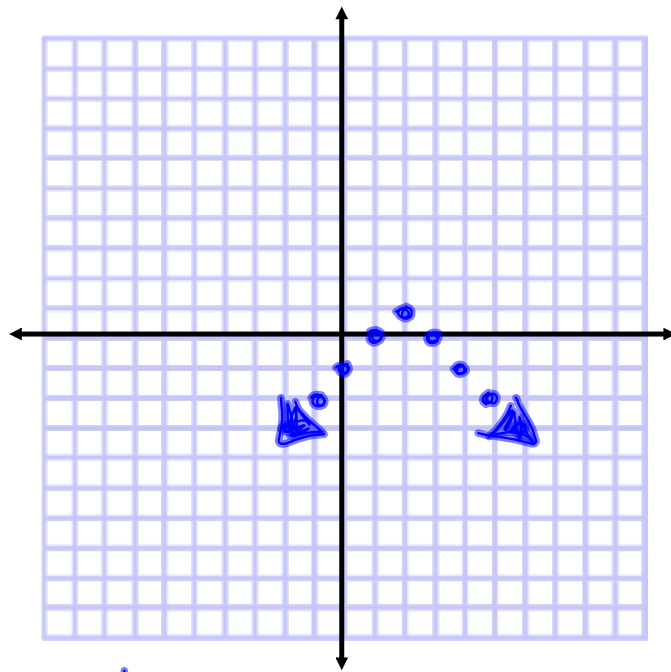




Domain: $-2 \leq x \leq 7, x \in \mathbb{R}$
Range: $y \in \mathbb{R}$



$$\begin{aligned} -5 &\leq x \\ x &\geq -5 \text{ iker} \end{aligned}$$



Domain : $x \in \mathbb{I}$

Range : $y \leq 1, y \in \mathbb{I}$

