

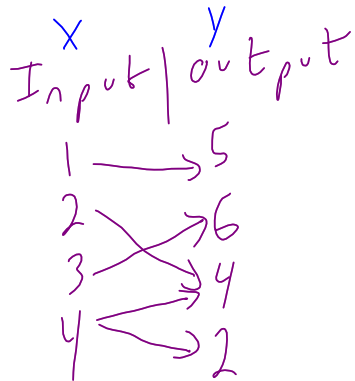
Ways to write a coordinate

- a)  $x$  is always the input and domain  
b)  $y$  is always the output and range

$x$ input	$y$ output
4	2
8	4
12	6

$(4, 2)$   $(8, 4)$   $(12, 6)$

$(x, y)$



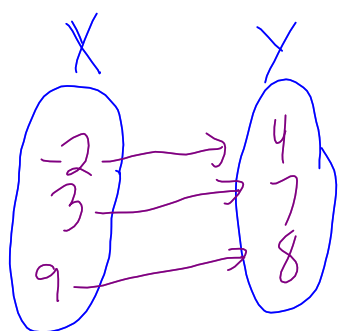
(1,5) (2,4)  
(3,6) (4,4) (4,2)

This is not a function  
because one x-value has  
two y-values

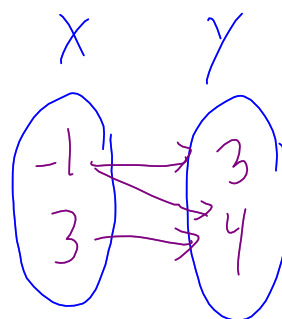
\* Each x value can only have one y  
value for in a set of numbers  
in order for the set to be a function

Mapping

$(x, y)$



least  
↓  
greatest

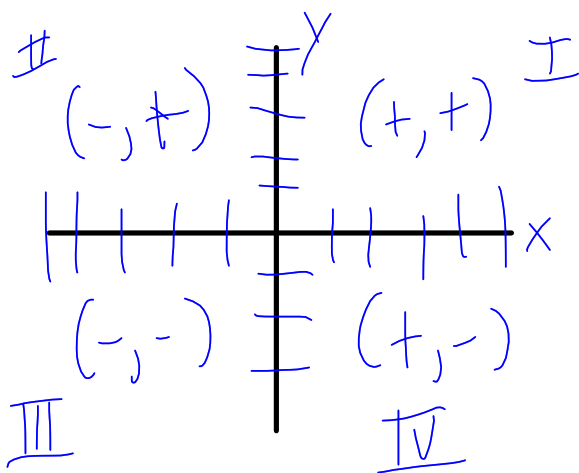


$(-2, 4) (3, 7) (9, 8)$

$(-1, 4) (-1, 3) (3, 4)$

yes

no



Finding Range  
 When given the  
 equation and domain  
 $y = \frac{1}{2}x + 1$  Domain (x)  
 -2, 0, 2, 4, 8

- (x, y)
- (-2, 0)
  - (0, 1)
  - (2, 2)
  - (4, 3)
  - (6, 4)

$$y = \frac{1}{2}(-2) + 1$$

$$= -1 + 1$$

$$= 0$$

$$y = \frac{1}{2}(0) + 1$$

$$y = 0 + 1$$

$$y = 1$$

$$y = \frac{1}{2}(2) + 1$$

$$y = 1 + 1 = 2$$

$$y = \frac{1}{2}(4) + 1$$

$$y = 2 + 1 = 3$$

$$y = \frac{1}{2}(6) + 1$$

$$y = 3 + 1 = 4$$

