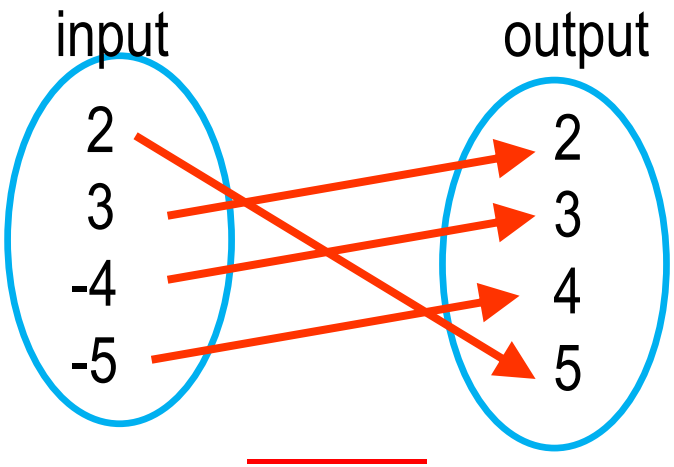
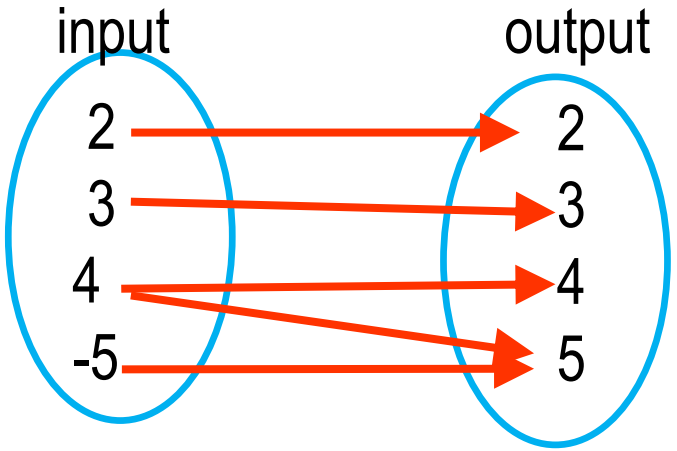
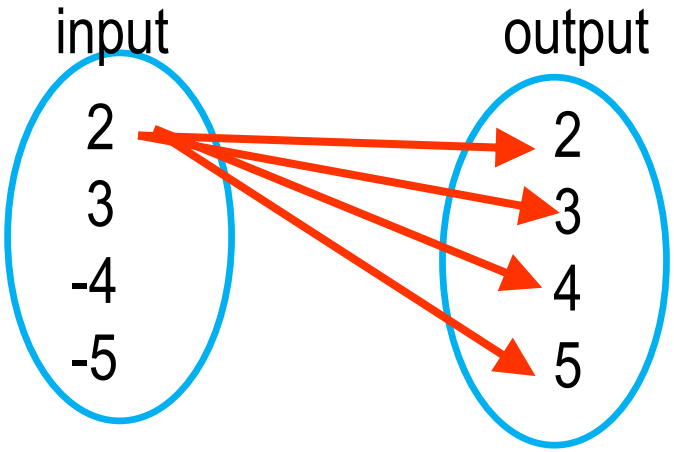
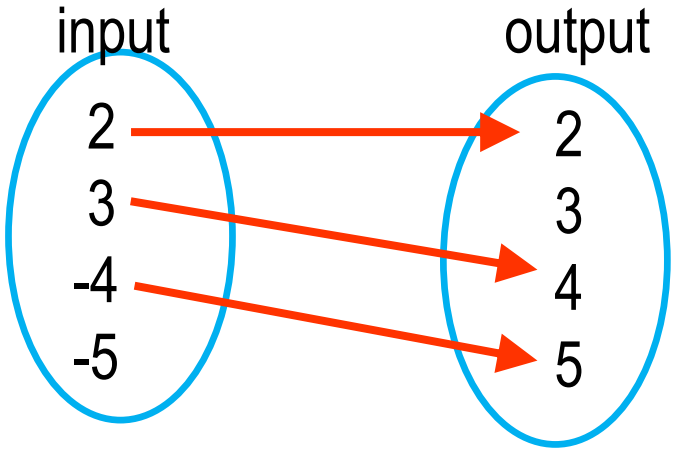
SM3-A Lesson 1-1 Handout (Linear Function)



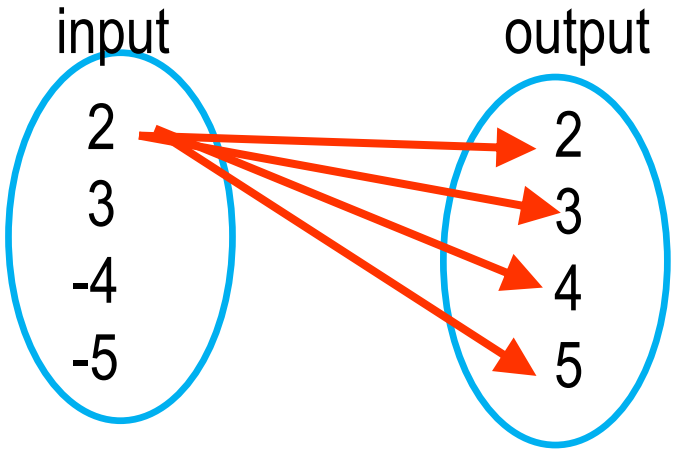






Is it a function?

Is it a function?



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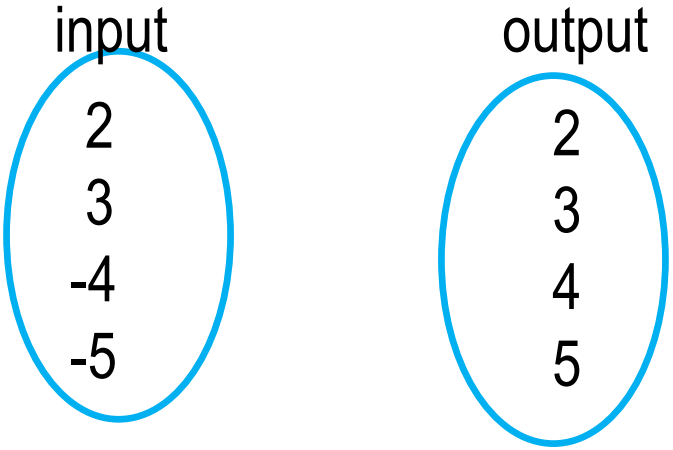

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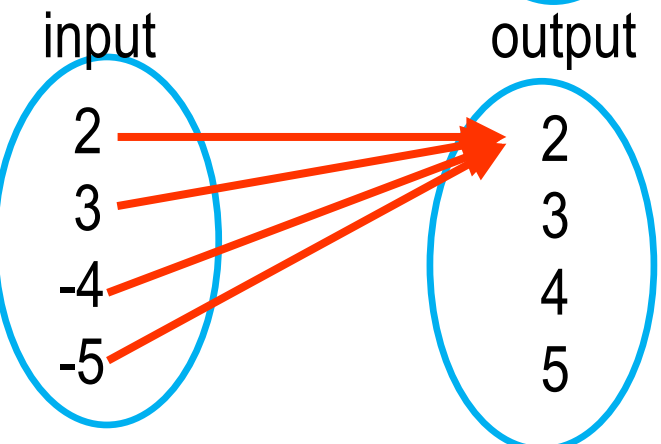


_____

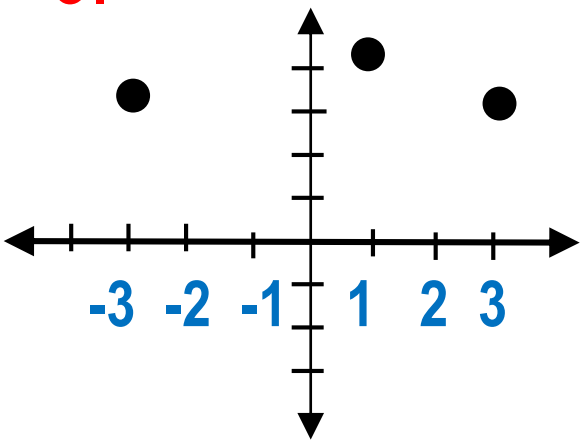
Identify the Domain

1. (2, 4), (3, 5), (-4, 2)

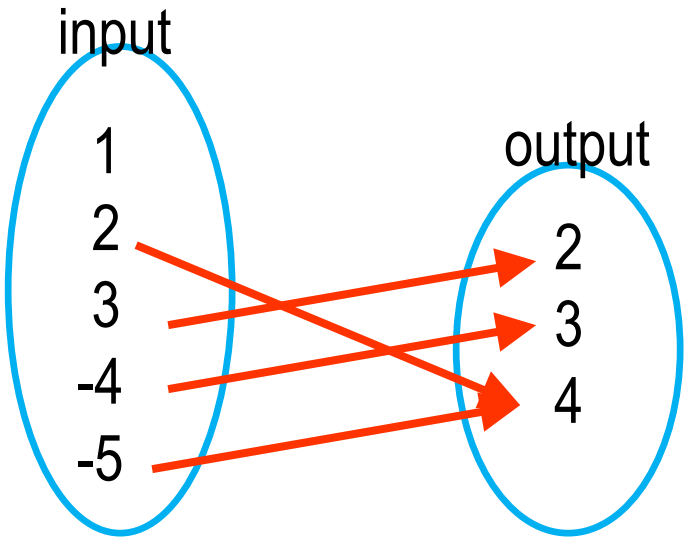
2.

x	6	9	-2
y	4	7	3

3.



4.



What are 6 ways you can show a relation between input and output ?

_____ _____ _____ _____

_____ _____

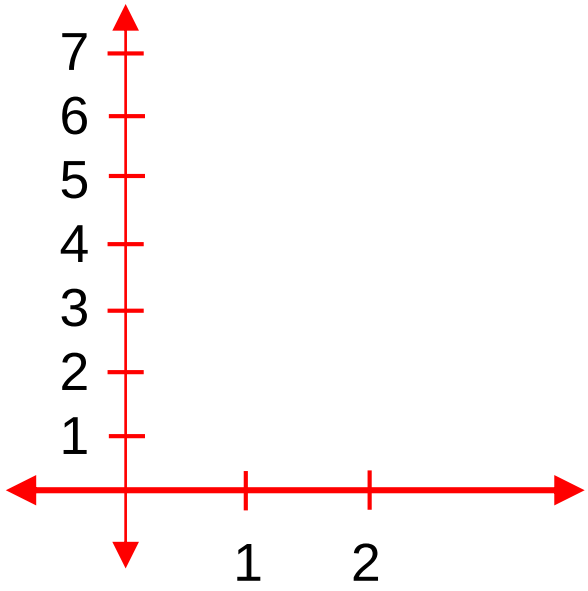
Which of the following equations is " 'y' a function of x"?

$$x = \frac{1}{2}y - 3 \qquad y = 2x + 6$$

Fill in the table then graph x-y pairs from the table.

$y = 3x + 1$

x	0	1	2
y			

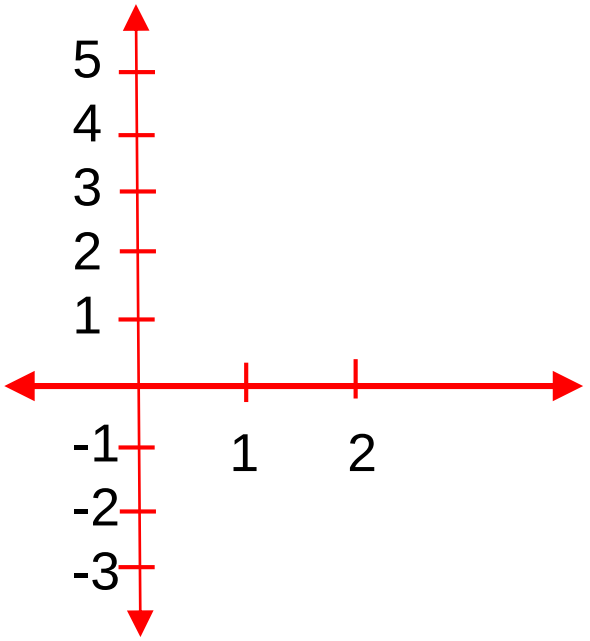


y-intercept: the x-y pair where a graph crosses the y-axis.

Solution of a two-variable equation: all x-y pairs that make the equation true.

$y = 4x - 3$

x	0	1	2
y			



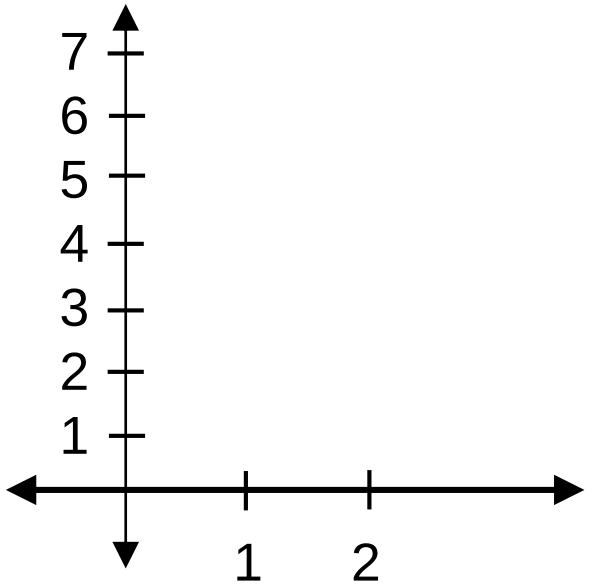
Does the table represent the complete solution? ____

Does the graph represent the complete solution? ____

Fill in the table then graph x-y pairs from the table.

$f(x) = x^2 + 2$

x	0	1	2
y			

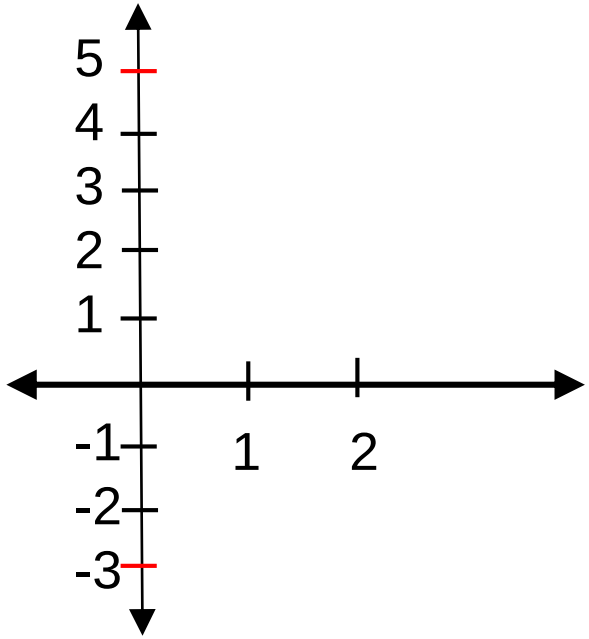


y-intercept: always results from *f(0)*.

Solution of a two-variable equation: all x-y pairs that make the equation true.

$g(x) = -2x^2 + 3x + 4$

x	0	1	2
y			



Why doesn't the table represent the complete solution?

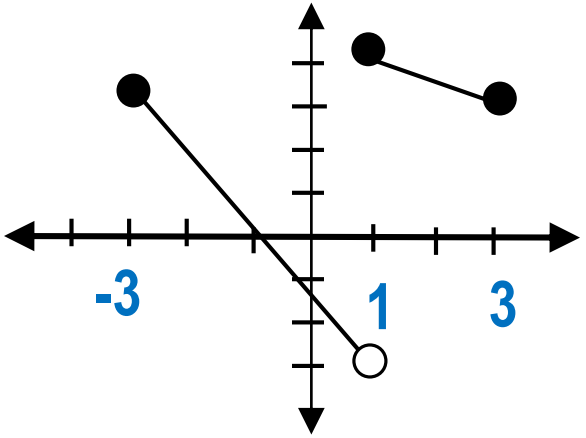
Is it a function? If not, why not?

1. (2, 4), (3, 5), (-4, 5)

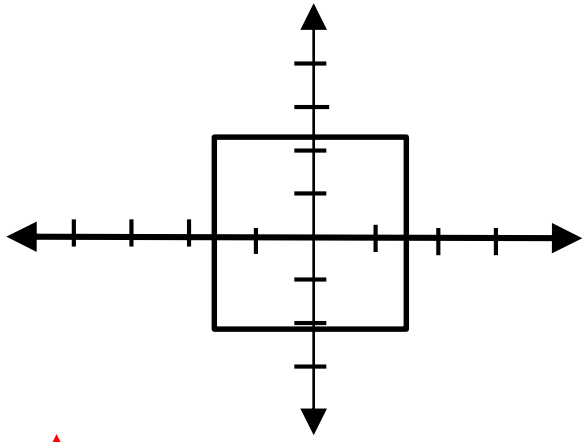
2.

x	6	6	-2
y	4	7	3

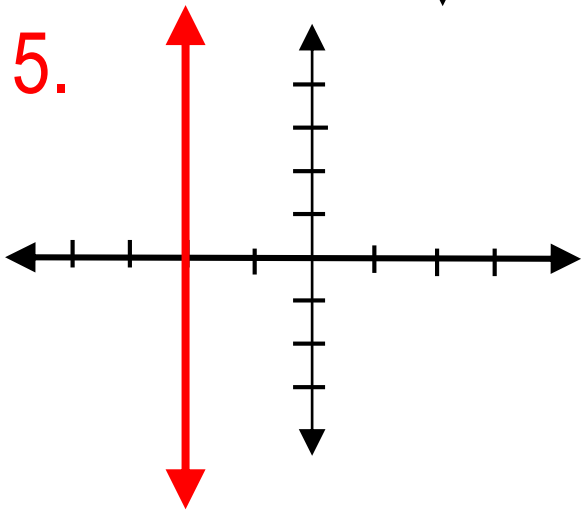
3.



4.



5.



1. Convert (2, 4), (3, 5), (-4, 5) into a table

2. Convert $f(3) = 6$, $f(-2) = 1$, $f(6) = -5$ into a table

3. Convert (2, 4), (3, 5), (-4, 5) into "function notation."

4. What special point does $f(0) = 7$ represent?

5. What special point does $f(3) = 0$ represent?