# 1.6/1.7 Functions Quiz Study Guide

### **1.6:** Functions as Rules and Tables

• Be able to identify an input output relationship as a function or not and explain why.

Are the following examples functions? If yes, state why. If not state why not.

Ex:

x	у
3	1
2	1
1	1
0	1

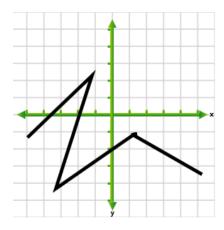
Ex

x	5	7	5	14
у	2	6	9	11

Yes, each input has one output

No, the input 5 has multiple outputs

Ex:



No, the graph would not pass the vertical line test. This means that an input has more than one output.

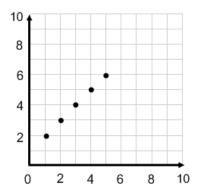
- Be able to identify domain and range of a function.

For the functions below, identify the domain and range.

Ex:

Input	Output
0	0
1	2
4	8
6	12

Ex:



Domain: \_\_\_\_1, 2, 3, 4, 5\_\_\_\_\_

Range: \_\_\_\_\_2, 3, 4, 5, 6 \_\_\_\_\_

Domain: \_0, 1, 4, 6\_\_\_\_\_

Range: \_\_0, 2, 8, 12\_\_\_\_\_

- Be able to write a rule for a function given a table or graph.

## Write a rule for each function below.

Ex:

x	у
-10	7
-5	5
0	3
5	1
10	-1

$$y = -\frac{2}{5}x + 3$$

Ex:

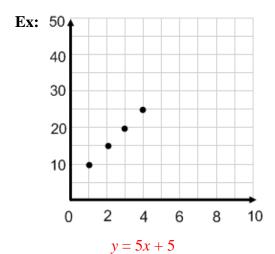
x	1	4	7	10
у	1	10	19	28

$$y = 3x - 2$$

Ex:

$\boldsymbol{x}$	y
0	1
2	5
4	9
6	13

$$y = 2x + 1$$



# 1.7: Represent Functions as Graphs

- Be able to graph a function

Ex: Graph the function y = 2x + 3 with a domain of -2, -1, 0, 1, 2

x	у
-2	-1
-1	1
0	3
1	5
2	7

