

Name _____ Date _____ Class _____

Lesson 1.6 Functions Notes

PART A: Definitions, Functions, and Mapping

Relation: _____.

Examples:

Domain: _____.

The x-values!!!!!!

Examples:

Range: _____.

The y-values!!!!!!

Examples:

Mapping the domain and range of a relation

1. Find the domain and range.
2. Put the domain in a column on the left and the range in a column on the right.
3. Use arrows to show what number or numbers the domain is paired with the range.

With the relation: $\{(\quad , \quad), (\quad , \quad), (\quad , \quad)\}$ the mapping is:

Domain

Range

Function: _____.

$\{(1, 5), (3, 4), (5, -2), (7, 0)\}$ is a function.

Not a Function: One input gives more than one output.

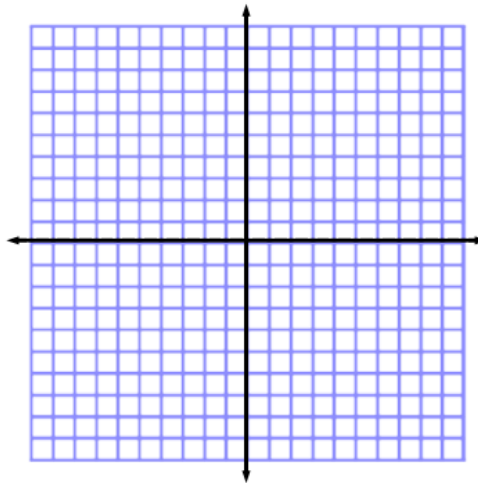
Examples:

Vertical-Line Test: ____

Find the mapping of the domain and range of the relation, graph the relation, then determine if it is a function.

$\{(0, 1), (1, 3), (5, 0)\}$

Domain: Range:



Function?

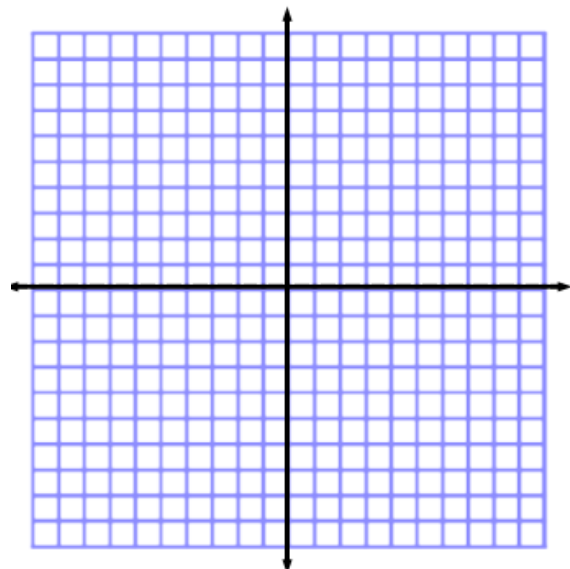
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PART B: Creating Graphs from Tables & Determining if it is a Function!

EX #1

Determine if the relationship represents a function.

$$y = x - 1$$



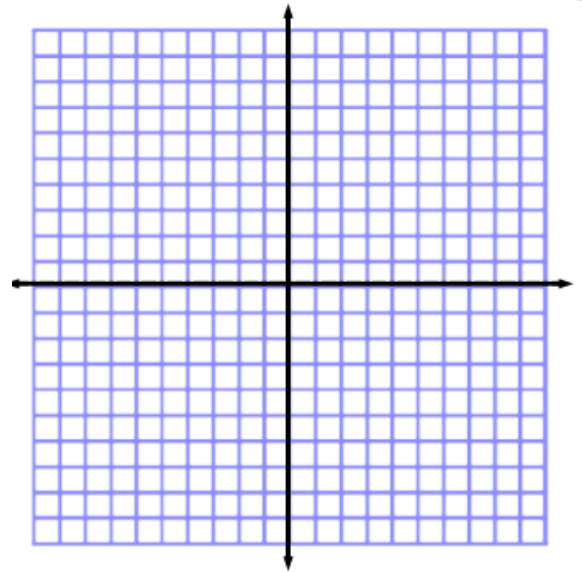
Lesson 1.6 Functions Notes Part B continued:

EX #2

Determine if the relationship represents a function.

$$y = x^3$$

Make an input-output table and use it to graph $y = x^3$.



EX #3

Determine if the relationship represents a function.

x	0	1	2	3
y	0	1	2	3

EX #4

Determine if the relationship represents a function.

x	2	3	3	2
y	3	4	5	6