Your Name

Mrs. T

10 /26/ 2020

Notes

LESSON 3-1

REPRESENTING RELATIONS

Objective: To be able to express relations as ordered pairs, tables, graphs, and mapping, and write the inverse relation.

Life Lesson/Skill: Before you make a judgment, you must get the whole story from as many points of view as possible. We need to understand how inputs and outputs are related so we can understand functions, graph them and use them to make predictions

Day 1

Relation-   a set of ordered pairs, an input is paired
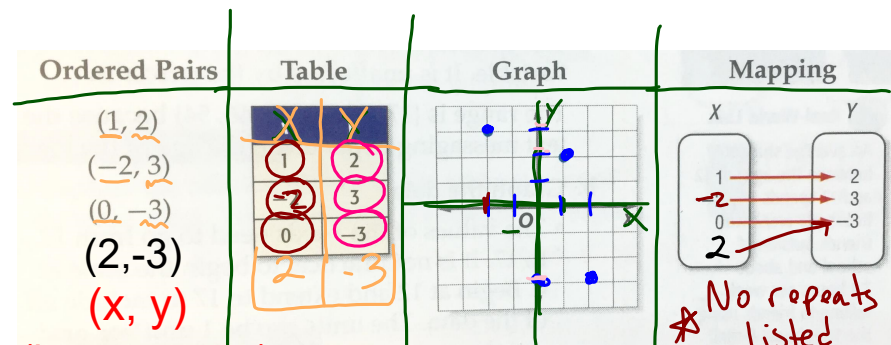   with an output   (x, y)

Domain-   the input values in a set... the x values

Range-   the output values in a set... the y values

Ways to express a relation:

4 different ways

Ordered Pairs	Table	Graph	Mapping

(1, 2)
(−2, 3)
(0, −3)
(2,-3)
(x, y)
(input, output)

Smallest to biggest

x's   Domain: $\{-2, 0, 1, 2 \ \}$

y's   Range: $\{-3, 2, 3 \ \}$

***Do not write repeat values

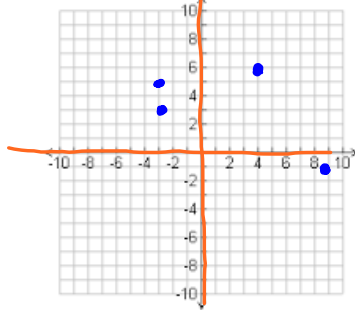*Do write values from least to greatest

Board Work!

Express the relation as a table, a graph, and a mapping. Then determine the domain the range.
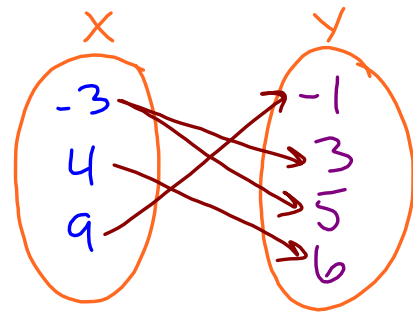
$$\{ (4,6) , (-3, 3) , (9, -1) , (-3, 5) \}$$

Table

X	Y
4	6
-3	3
9	-1
-3	5

Graph

Mapping

x's   Domain: $\{ -3, 4, 9 \}$

y's   Range: $\{ -1, 3, 5, 6 \}$

***Do not write repeat values   *Do write values from least to greatest