

Introducing Functions

A **function** is a set of ordered pairs (relation) that has **one unique output for every input**

Functions can be displayed in many ways:

Ordered Pairs

$(-1, 3)$ $(2, 0)$

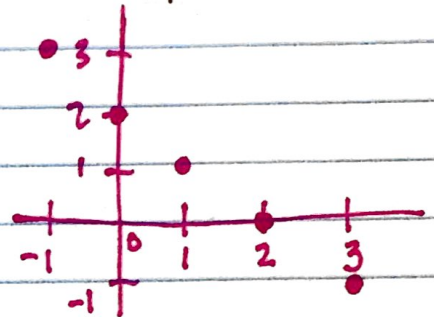
$(0, 2)$

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

Table

x	y
-1	3
0	2
1	1
2	0
3	-1

Graph



Functions can pass the **"Vertical Line Test"**

All values that go into a function are called the **domain** (input) x

All values that come out of a function are called the **range** (output) y

Domain

Range

Independent Var.
x-coordinate
input

Dependent Variable
y-coordinate
output