## Worksheet on Functions, Domain, and Range

## Level 2 Practice:

For each diagram, list the domain and range, and state whether or not it is a function.

DOMAIN:

$(-2,3),(3,-2),(1,3),(0,-2)$
DOMAIN: RANGE: FUNCTION Yes/No
$(3,-2),(-2,3),(3,1),(-2,0)$
DOMAIN: RANGE: FUNCTION
Yes/No


OMAIN: RANGE:


DOMAIN: RANGE: FUNCTION Yes/No

## Worksheet Level 2:

## Goals:

Define a function
Concept \# $\qquad$
Identify a function from a table, list of coordinate points, or a diagram

## Practice \#1

A. Which tables below represent functions. Explain your answers.

| Table 1 |  |
| :---: | :---: |
| Input <br> $x$ | Output <br> $y$ |
| -2 | -3 |
| -1 | -1 |
| 0 | 1 |
| 1 | 3 |
| 2 | 5 |
| 3 | 7 |
| 4 | 9 |


| Table $\mathbf{2}$ |
| :---: |
| Input <br> $\boldsymbol{x}$ Output <br> $\boldsymbol{y}$ <br> 4 -2 <br> 1 -1 <br> 0 0 <br> 1 1 <br> 4 2 <br> 9 3 <br> 16 4 |

Table 3

| Input <br> $x$ | Output <br> $y$ |
| :---: | :---: |
| -2 | 0.44 |
| -1 | 0.67 |
| 0 | 1 |
| 1 | 1.5 |
| 2 | 2.25 |
| 3 | 3.37 |
| 4 | 5.06 |

Table 4

| Input <br> $\boldsymbol{x}$ | Output <br> $\boldsymbol{y}$ |
| :---: | :---: |
| -2 | -3 |
| -1 | -5 |
| 1 | -1 |
| 1 | -3 |
| 2 | -10 |
| 3 | -2 |
| 3 | -8 |

Table 1: $\qquad$

Table 2: $\qquad$

Table 3: $\qquad$

Table 4: $\qquad$

## Practice \#2

Functions:

> DOMAIN: the input of a function RANGE: the output of a function

For a relationship to be a function there must be $\qquad$ output for each input.

For each table below:
i. does the table represent a function?
ii. what is the domain?
iii. what is the range?

Table A

| Input | Output |
| :---: | :---: |
| 1 | 2 |
| 2 | 4 |
| 3 | 6 |

Table B

| Input | 1 | 0 | 1 |
| :--- | :---: | :---: | :---: |
| Output | 1 | 2 | 5 |

Table C

| Input | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Output | 0 | 0 | 0 | 0 | 0 | 0 |

