

Warm-Up

1/30/2018

1. If a random hat size were chosen, how many outcomes are there where the hat fits a student at Skyline?
2. Is it possible for more than one student in this class to have the same cell number?

1. One student/multiple/none can fit the hat.

If a hat fit multiple students... NOT a function

2. No. Every cell number belongs to only one person

1 number : 1 person ... IS a function

* Function: a relation (between 2 variables) in which each input has one and only one output.

(input, output)

input (x)	output (y)	(x, y)
↓	↓	
independent variable	dependent variable	

Domain / Range

Domain refers to all possible x-values of a function/relation.

Range refers to all possible y-values of a function/relation.

How to write domain and range:

- determine if function is : DISCRETE $\{ \}$
CONTINUOUS $[] ()$
- order values from min to max.

Function Inputs/Outputs

*domain/range

Ex. $y = 3x - 7$

x	y		
-2	-13	$\longrightarrow y = 3(-2) - 7$	$(-2, -13)$
-1	-10	$\longrightarrow y = 3(-1) - 7$	$(-1, -10)$
0	-7	$\longrightarrow y = 3(0) - 7$	$(0, -7)$
1	-4	$\longrightarrow y = 3(1) - 7$	$(1, -4)$
2	-1	$\longrightarrow y = 3(2) - 7$	$(2, -1)$

Ex. Find the outputs (y) for $y = -x^2 + 5$

x	y
-2	
-1	
0	
1	
2	