

Functions: Verbally vs. Table

Input = x

1. Underline key words
2. Create the equation (algebraic) $\rightarrow y = mx + b$
3. plug the table values into the equation to see if it works.

EX1: This function multiplies the input by 3

$Y = mx + b$

$$y = 3x$$

Plug x and y into table to see if it works.

$$-3 = 3(-1)$$

$$-3 = -3$$

$$0 = 3(0)$$

$$0 = 0$$

$$-2 = 3(-1)$$

$$-2 = -3$$

Which table matches this verbal function

x	y
-1	-3 ✓
0	0 ✓
1	3

x	y
-1	-2 ✗
0	3
1	8

EX2. The function multiplies the input by 1 then adds 2 to it.

$Y = mx + b$

$$y = 1x + 2$$

$$y = x + 2$$

Plug x and y into table to see if it works.

$$0 = -1 + 2$$

$$0 = 1$$

$$1 = -1 + 2$$

$$1 = 1$$

Which table matches this verbal function

x	y
-1	0
0	1
1	2

x	y
-1	1
0	2
1	3

EX3: This function divides the input by 2

$Y = mx + b$

Plug x and y into table to see if it works.

Which table matches this verbal function

x	y
-1	-1/2
0	0
1	1/2

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

EX4: The function multiplies the input by 2 then subtracts 2 from it.

Plug x and y into table to see if it works.

Which table matches this verbal function

x	y
-1	-4
0	-2
1	0

x	y
-1	-3
0	-1
1	1