

FUNCTION TABLES NOTES

Example 1A: Completing a Function Table

Find the output for each input.

$$y = 8x + 5$$

Input	Rule	Output
x	$8x + 5$	y
-4	$8(-4) + 5$	
-2	$8(-2) + 5$	
1	$8(1) + 5$	

substitute x with the input # given and solve.

Input=Domain Output=Range

Steps for Solving a Function Table:

1. Rewrite the rule substituting the input or output for the variable.
2. If the variable is by itself (ie. $Y=3x$) Just solve
3. If variable is not by itself (ie. $-5 = x + 4$), you must work to get the variable (x) by itself (the **opposite operation-inverse**)

$$\begin{array}{r} \text{ie. } -5 = x + 4 \\ \hline -4 \quad | \quad -4 \\ \hline -9 = x \end{array}$$

You can also use a graph to represent a function. The corresponding input and output values together form unique ordered pairs.

Remember!

An ordered pair is a pair of numbers that represents a point on a graph. (x, y)

Helpful Hint

When writing an ordered pair, write the input value first and then the output value.

Example 2A: Graphing Functions with Ordered Pairs

Make a function table for $x = -2, -1, 0, 1, \text{ and } 2$, and graph the resulting ordered pairs.

$$y = 3x - 4$$

Input	Rule	Output	Ordered Pair
x	$3x - 4$	y	(x, y)
-2			
-1			
0			
1			
2			

