

Unit 3 Day 5

Function Notation and Finding Values from Tables and Graphs

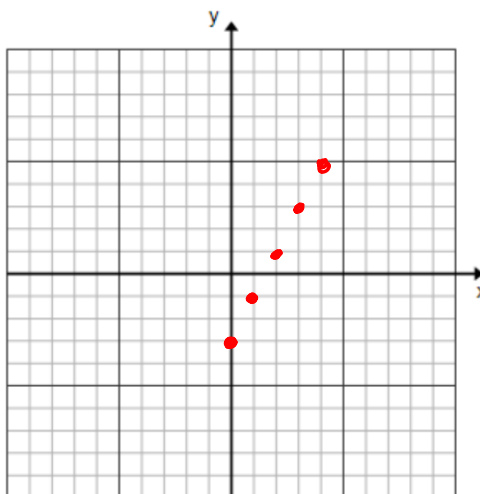
Ex. 1 Graph the function $f(x) = 2x - 3$ with domain $x = 0, 1, 2, 3, 4$

a. Make an input/output table

x	y
-2	-3
-1	-1
0	1
1	3
2	5

$f(0) = 2(0) - 3 = -3$
 $f(1) = 2(1) - 3 = -1$
 $f(2) = 2(2) - 3 = 1$
 $f(3) = 2(3) - 3 = 3$
 $f(4) = 2(4) - 3 = 5$

b. Graph



Connect the points? Why or why not?
 no! restricted domain!
 only want $x=0, 1, 2, 3 \& 4$

Ex. 2 Given the verbal rule $f(x)$: The output is 1 less than triple the input

a. Write an equation that represents the rule:

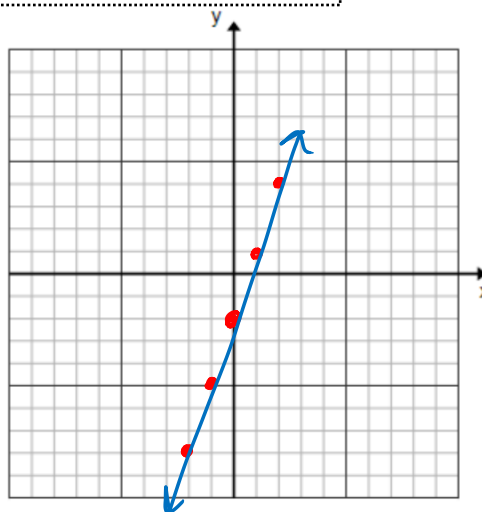
$$f(x) = 3x - 1$$

b. Make a Table

x	y
-2	-7
-1	-4
0	-1
1	2
2	5

$f(-2) = 3(-2) - 1 = -7$
 $f(-1) = 3(-1) - 1 = -4$
 $f(0) = 3(0) - 1 = -1$
 $f(1) = 3(1) - 1 = 2$
 $f(2) = 3(2) - 1 = 5$

Graph:



Connect the points? Why or why not?
 Yes! no restriction!

(#3-7) Use the table below to evaluate the following:

x	f(x)	h(x)
-1	2	-1
0	0	1
1	1	3
2	0	5
3	2	7

12. $h(1) = 3$

16. Find x when $h(x) = 5$

$x = 2$

13. $f(0) = 0$

17. Find x when $f(x) = 2$

$x = -1, x = 3$

14. $4 \cdot f(3) = 4(2) = 8$

15. $f(-1) + f(2) = 2 + 0 = 2$

