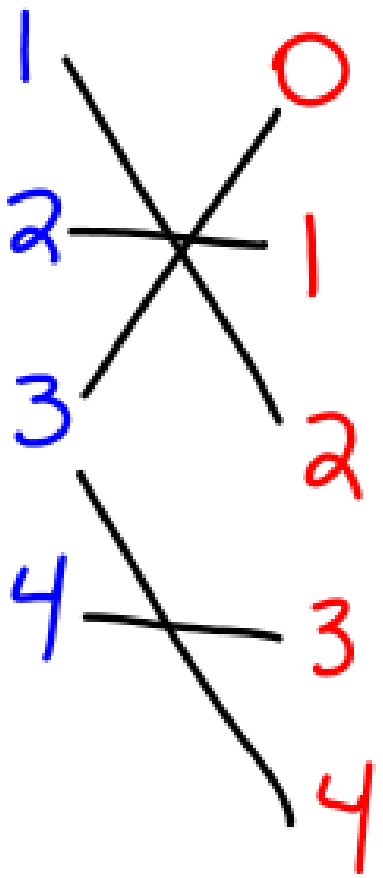
Chapter 9-1 to 9-3 Review Part 1

Determine if the relation is a function. Explain.

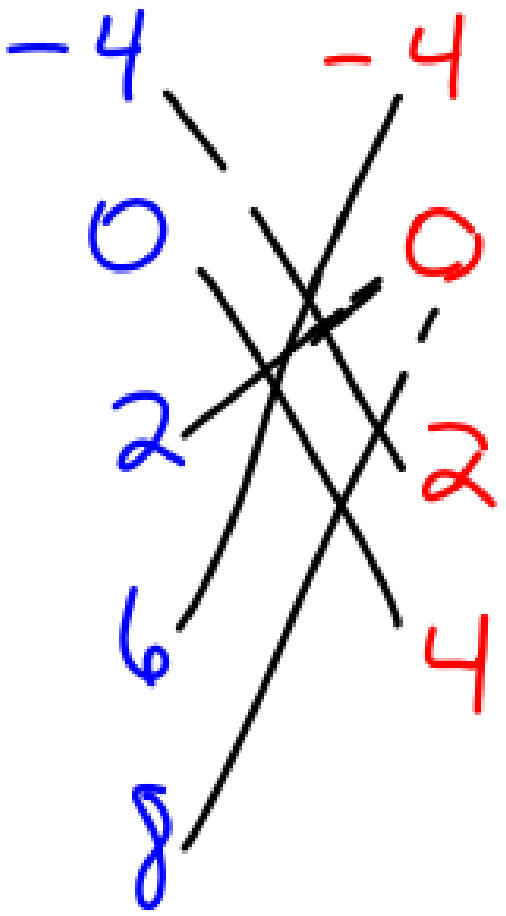
1. (1,2), (2,1), (3,0), (3,4), (4,3)



Not a function.
Input 3 has two outputs.

Determine if the relation is a function. Explain.

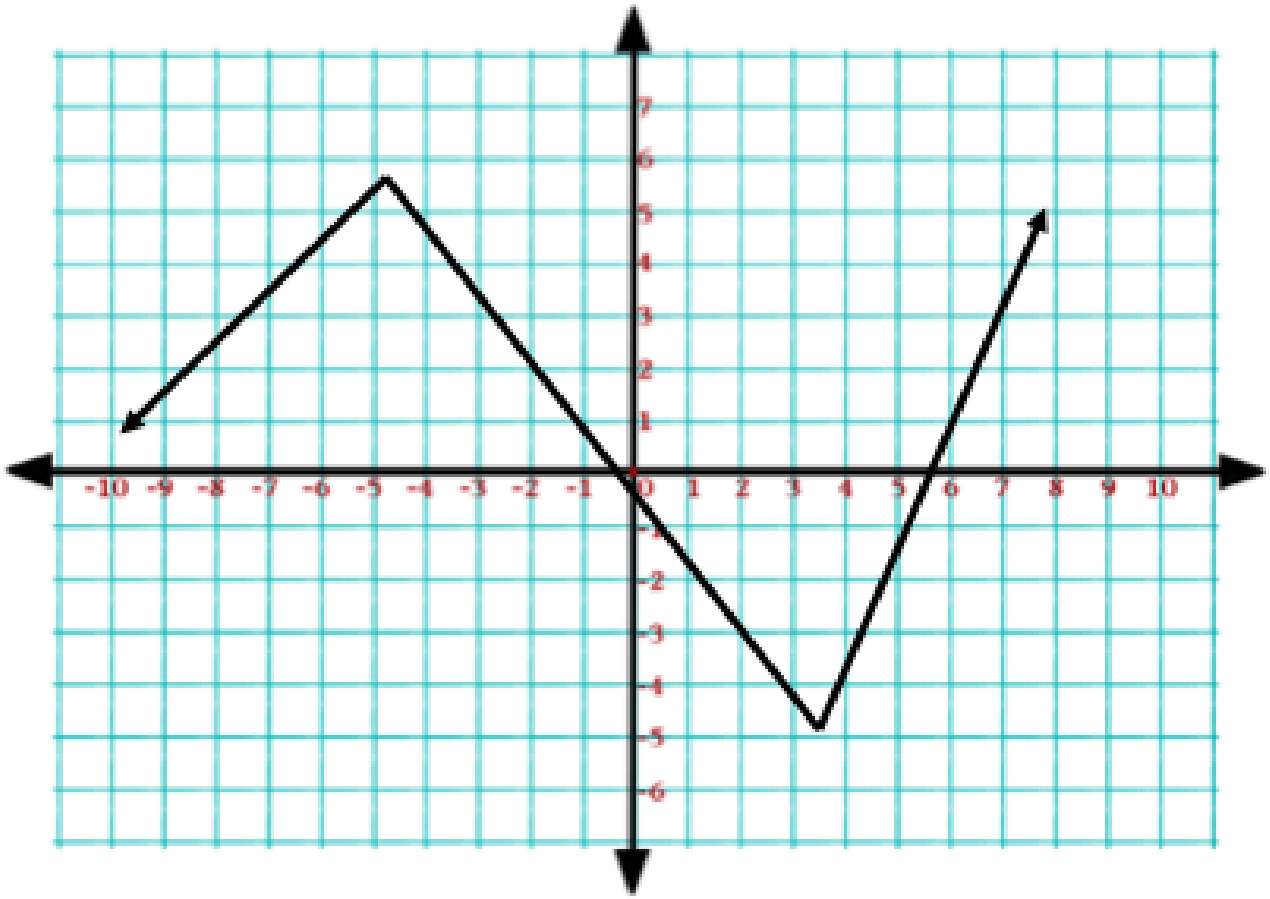
2. (0,4), (2,0), (6,-4), (-4,2), (8,0)



Yes it's a function.
Every input (x) has only one output.

Determine if the relation is a function. Explain.

3.



Yes, it's a function. Passes the Vertical Line Test.

If f(x) = -3x + 1, find each function value

4. f(-1)

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

$= 3 + 1$

$= 4$

$(-1, 4)$

5. f(5)

$f(x) = -3(5) + 1$

$= -15 + 1$

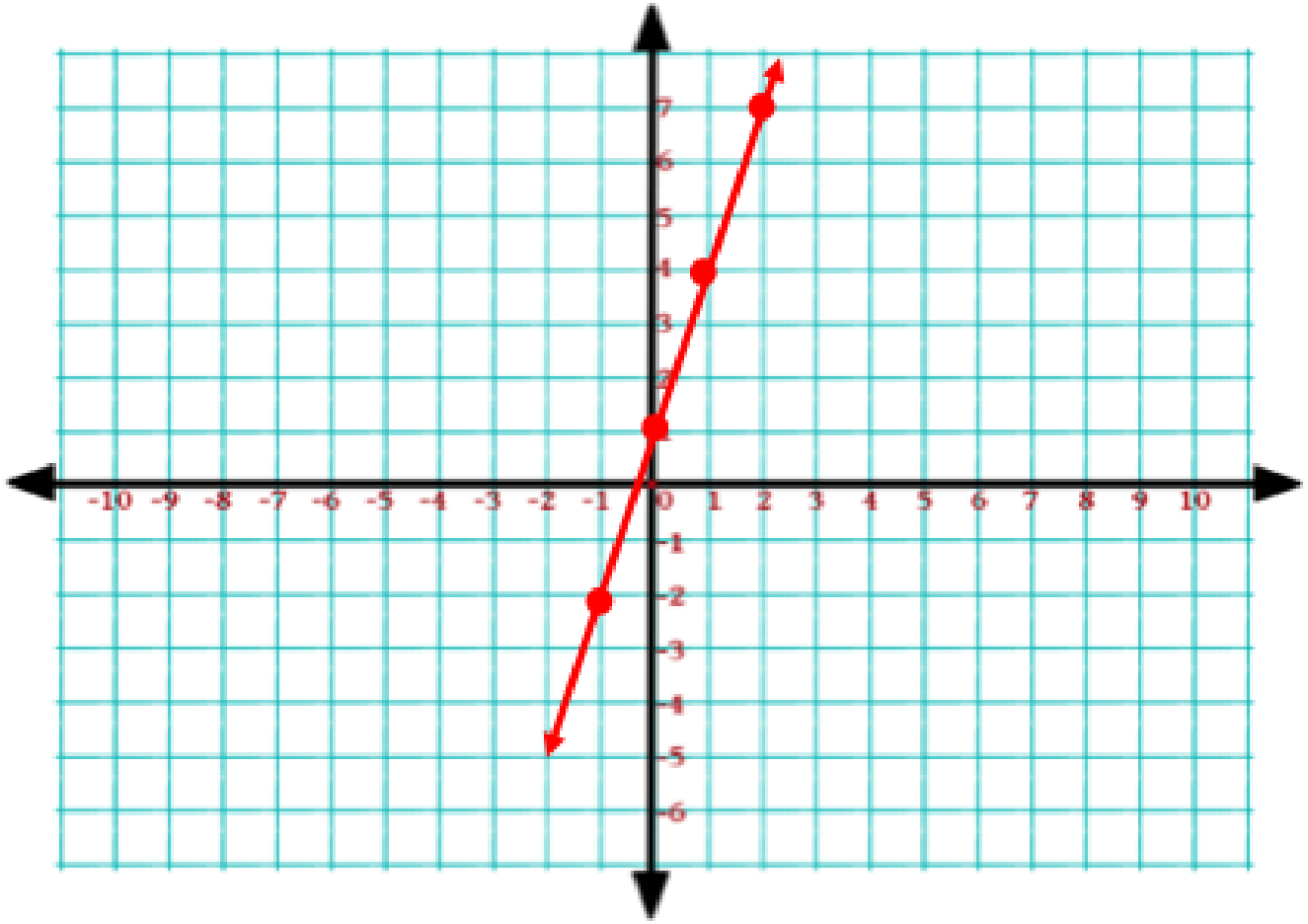
$= -14$

$(5, -14)$

Find 4 solutions to each function/equation; then graph.

6. $y = 3x + 1$

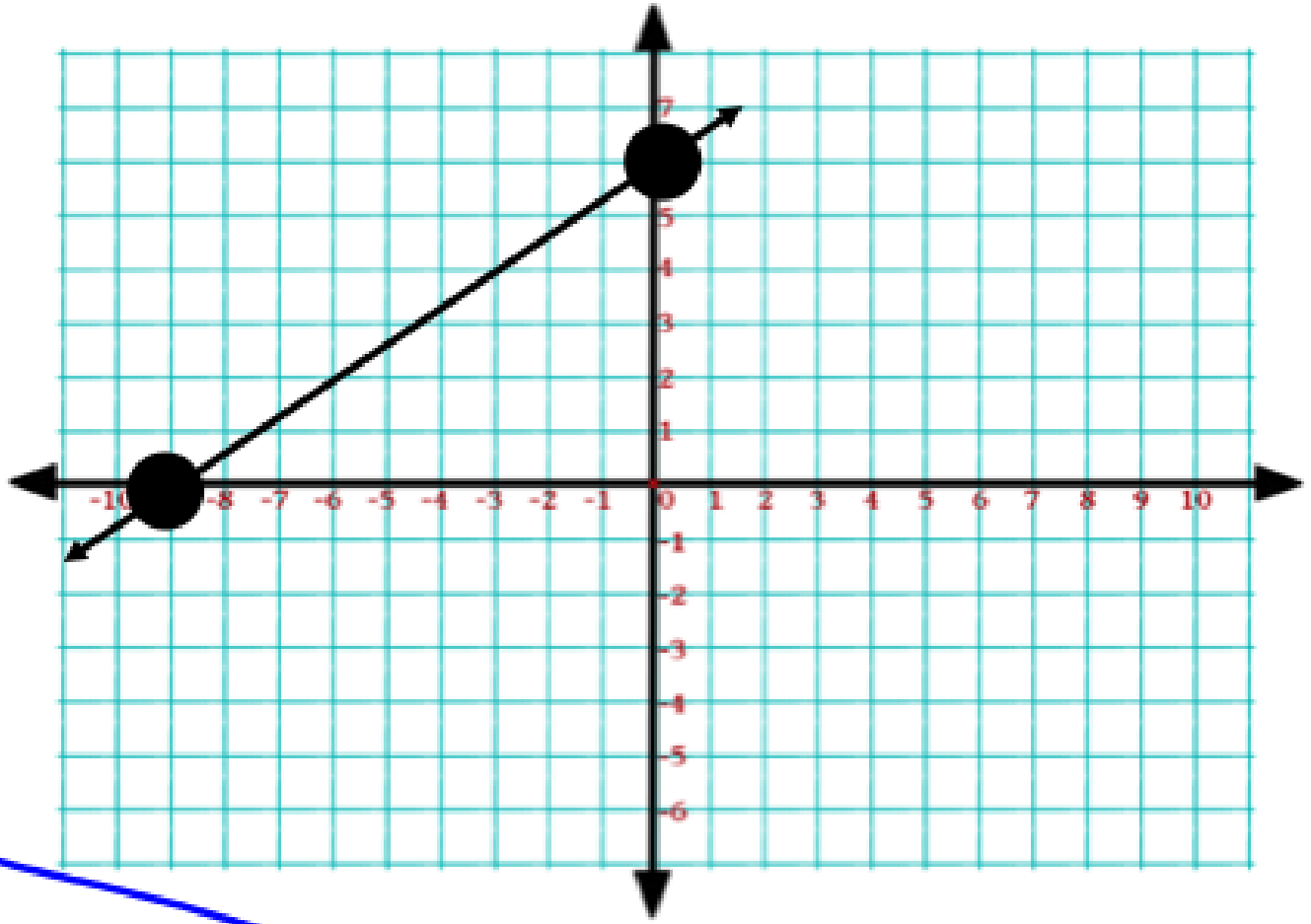
x	y
-1	-2
0	1
1	4
2	7



Using the intercepts, graph the function/equation.

7. $2x - 3y = -18$

x	y
-9	0
0	6



$2x - 3(0) = -18$

$2x = -18$

$x = -9$

$2(0) - 3y = -18$

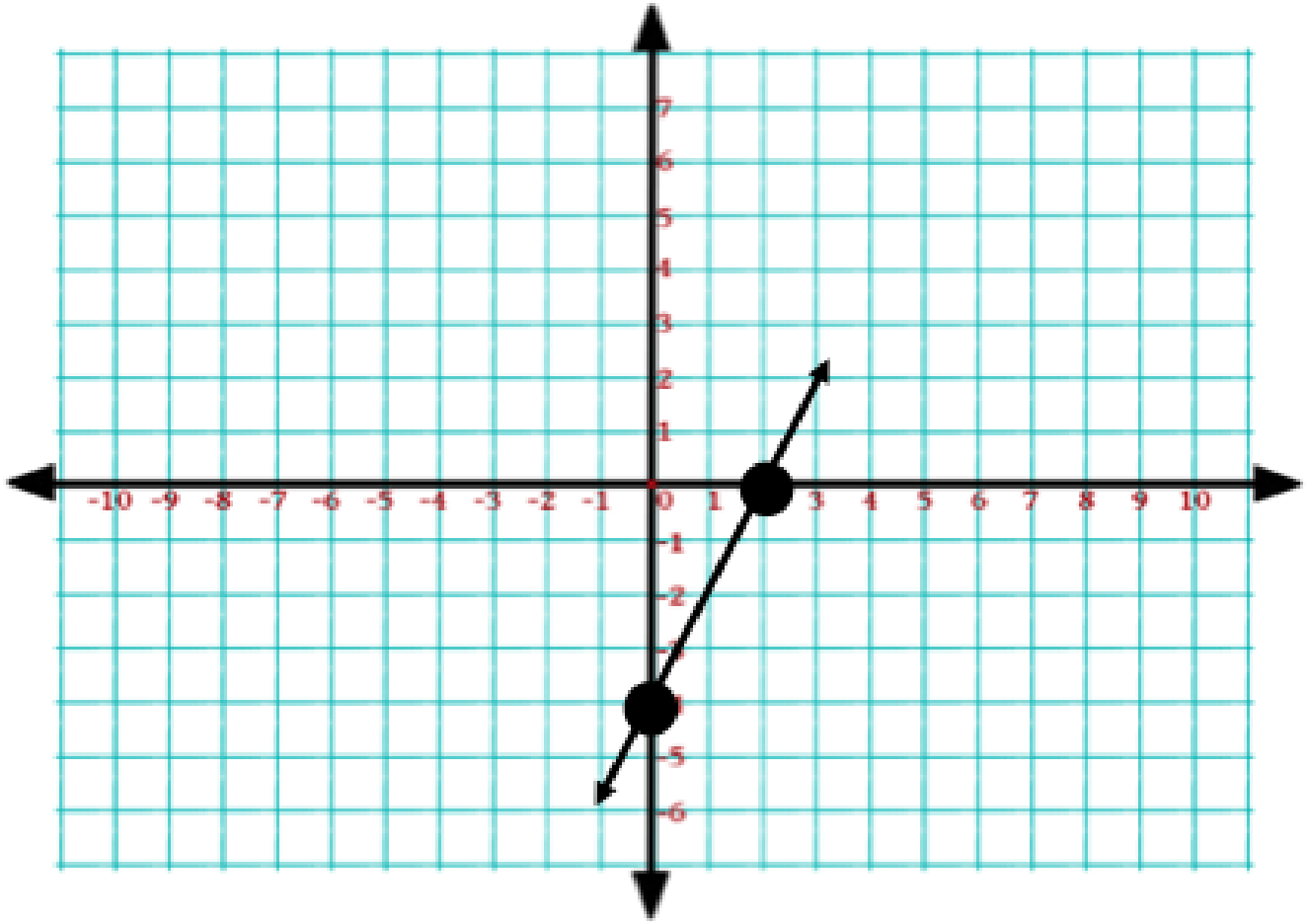
$-3y = -18$

$y = 6$

Using the intercepts, graph the function/equation.

8. $y = 2x - 4$

x	y
2	0
0	-4



$0 = 2x - 4$

$4 = 2x$

$2 = x$

$y = 2(0) - 4$

$y = -4$