

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: 158

## Function Notation

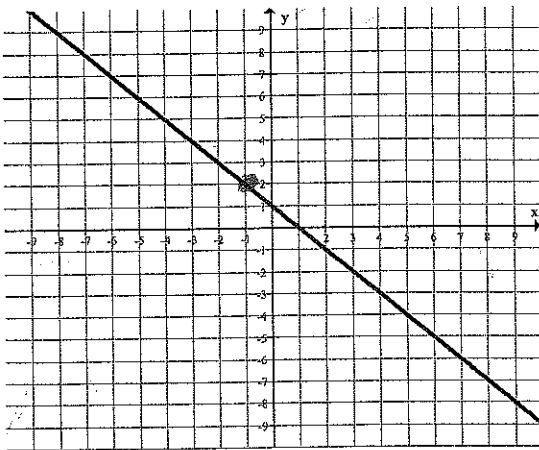
Released STAAR question:

For the function,  $w$ ,  $w(9) = -7$  and  $w(-7) = 9$ . If  $y = w(x)$ , what is the value of  $y$  when  $x = -7$ ?

Record your answer and fill in the bubbles on your answer document.

**Explore:**      **Note:**  $f(x) = y$

1) Look at the graph below. The value of  $f(-1)$  is 2.

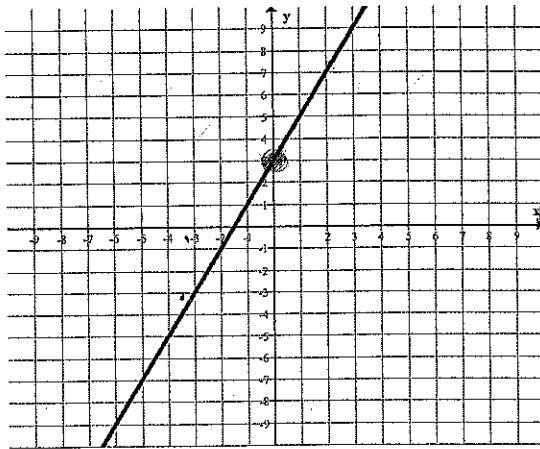


$$(-1, 2)$$

$$f(4) = -3$$

$$f(x) = 4 \text{ what is } x? \underline{3}$$

2) Look at the graph below. The value of  $f(0)$  is 3.



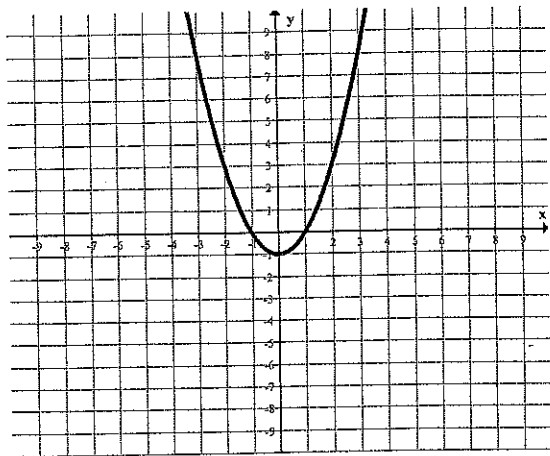
$$f(2) = 7$$

$$f(x) = -3 \text{ what is } x? \underline{-3}$$

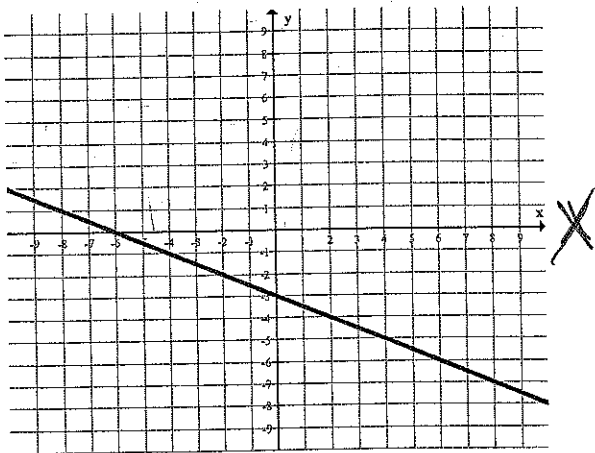
$$y = -3$$

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3) Look at the graph below. The value of  $f(3)$  is 8.



4) Look at the graph below. The value of  $f(-2)$  is ~~2~~ -2



$y$   
 $f(x)$

a. Write a sentence describing the meaning of  $f(-2)$ .

When the value of  $x$  is  $-2$ , the function equals  $-2$  (or  $y$  is  $-2$ )

b. Write a sentence describing how to find  $f(x)$  for any value of  $x$ .

Find the  $x$ -value on the  $x$ -axis, go up/down until you are on the function then read  $y$ -value

c. What is  $f(-4)$ ?

-1

What is  $f(6)$ ?

-6

What is  $f(-6)$ ?

0

d. Look at the graph in #4). How do you think you would find  $x$  when  $f(x) = -3$ ?

Go up/down  $y$ -axis until you are at  $-3$  then read  $x$ -value