

Name: PreAP CWJK Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Function Notation

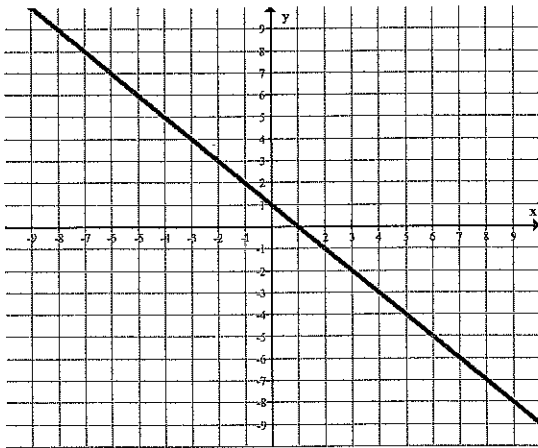
Released STAAR question:

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.

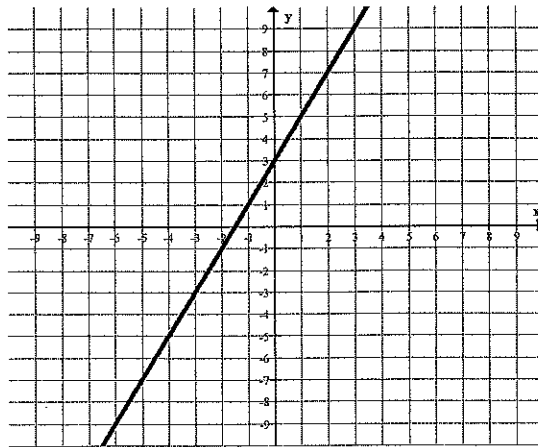
**Explore:**      **Note:**  $f(x) = y$

- 1) Look at the graph below. The value of  $f(-1)$  is 2. means: The function evaluated at -1 is 2.  
 $(-1, 2)$



Now find:  
 $f(4) =$  \_\_\_\_\_  
If  $f(x) = 4$ , what is  $x$ ? \_\_\_\_\_

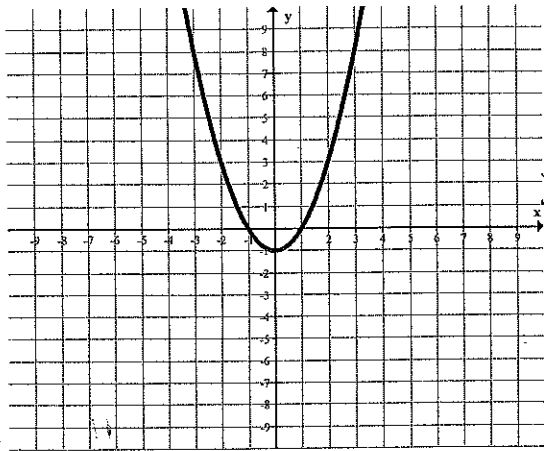
- 2) Look at the graph below. The value of  $f(0)$  is 3. means: The value of the function when  $x$  is 0 is 3.



Now find:  
 $f(2) =$  \_\_\_\_\_  
If  $f(x) = -3$ , what is  $x$ ? \_\_\_\_\_

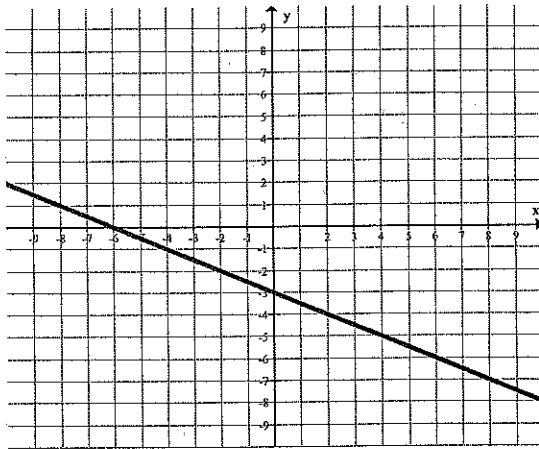
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3) Look at the graph below. The value of  $f(3)$  is 8.



Now find:  
 $f(-1) =$  \_\_\_\_\_  
If  $f(x) = -1$ , what is  $x$ ? \_\_\_\_\_

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



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

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

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

What is  $f(6)$ ?

What is  $f(-6)$ ?

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