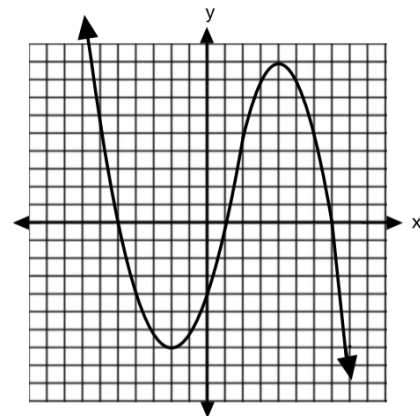


Name: \_\_\_\_\_

**Quiz: Evaluating Functions & The TI-Nspire Calculator****Part I: Multiple Choice**

Circle the correct answer for each question below.

- Tod graphs the function  $f(x) = -2x + 1$  in his calculator. To display a table of values for his graph, he must press
  - CTRL-tab
  - CTRL-T
  - CTRL-Z
  - CTRL-X
- If  $f(x) = -2x^2 - 3$ , what is the value of  $f(-4)$ ?
  - 35
  - 29
  - 61
  - 67
- Given the function notation  $g(-3) = 9$ , which of the following is true?
  - 9 is the input and -3 is the output
  - The function  $g$  could be represented by  $g(x) = 3x$
  - 3 is the input and 9 is the output
  - The function  $g$  could be represented by  $g(x) = 2x - 3$
- Which steps will allow you to type a fraction in the calculator?
  - CTRL → ENTER
  - CTRL → T
  - CTRL → G
  - CTRL → ÷
- The function  $h(x)$  is shown graphed to the right. Which of following is the value of  $h(0)$ ?
  - 1
  - 4
  - 5
  - 4



**Part II: Constructed Response**

Answer each question below and be sure to show all work.

6. Evaluate  $f(x) = 4$  when  $f(x) = 2x + 6$ .

7. Consider the function  $f(x) = -3x - 6$  over the domain  $-2 \leq x \leq 3$ .

a. Generate a table of values using your calculator and fill in the column for  $f(x)$ .

$x$	$f(x)$
-2	
-1	
0	
1	
2	
3	

b. What steps did you take using the calculator to generate a table of values? List them below.

Calculator Steps

c. What is the value of  $f(-2)$ ?

8. Romel wants to find the value of  $k(-1)$ , where  $k(x) = 4x^2 - 1$  using his calculator. He generates the following table of values:

a. Is this the correct table of values? Explain.

$x$	$k(x)$
-2	16
-1	4
0	0
1	4
2	16

b. What function did Romel type in Y=? What did he forget?