**DigitLit** math instruction

Name: _____

Quiz: Evaluating Functions & The TI-84 Calculator

Part I: Multiple Choice
Circle the correct answer for each question below.

1. What are the steps to get a table for the function $f(x) = -2x + 1$?

    1) Press 2nd, GRAPH

    2) Press Y=, type $-2x + 1$ into Y_1, press 2nd GRAPH

    3) Press Y=, type $-2x + 1$ into Y_1, press GRAPH

    4) Type $-2x + 1$ in the home screen (not in Y=), press 2nd GRAPH

2. If $f(x) = -2x^2 - 3$, what is the value of $f(-4)$?

    1) -35

    2) 29

    3) 61

    4) -67

3. Given the function notation $g(-3) = 9$, which of the following is true?

    1) 9 is the input and -3 is the output

    2) The function g could be represented by $g(x) = 3x$

    3) -3 is the input and 9 is the output

    4) The function g could be represented by $g(x) = 2x - 3$

4. Which steps will allow you to type a fraction in the calculator?

    1) ALPHA→ Y=→ ENTER

    2) ALPHA→GRAPH

    3) 2nd → Y=→ ENTER

    4) 2nd→ GRAPH

5. The function $h(x)$ is shown graphed to the right. Which of following is the value of $h(0)$?

    1) 1

    2) -4

    3) -5

    4) 4

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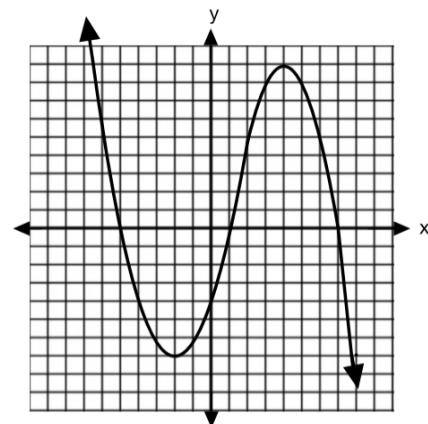
Part II: Constructed Response
Answer each question below and be sure to show all work.

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 to 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?