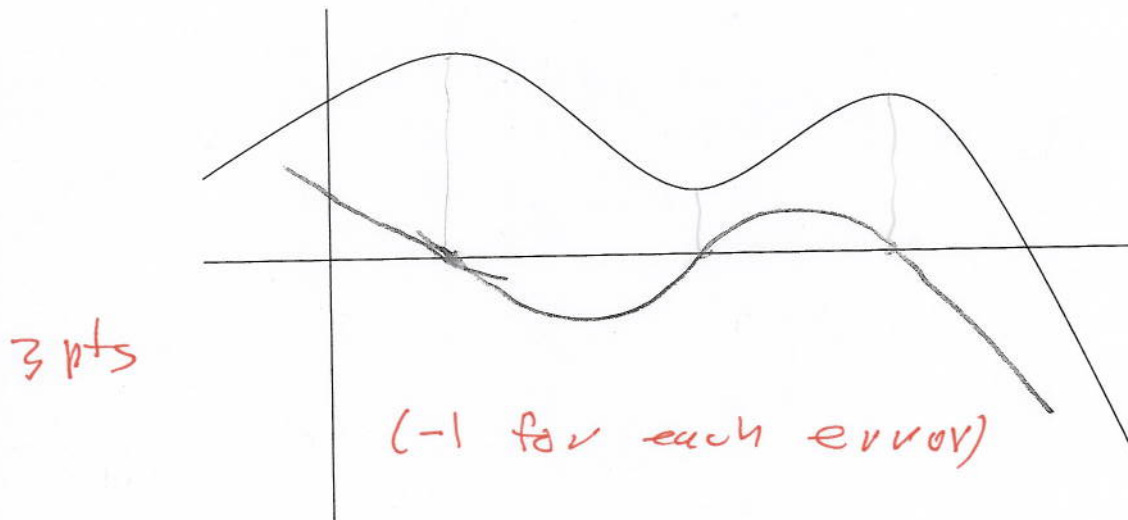**Quiz #8**

Name: _____ Key _____

You must show your work to get full credit.

(1) Graph the graph of the derivative $y = f'(x)$ for the function $y = f(x)$ given in Figure 1.

3 pts

(−1 for each error)

FIGURE 1. Graph of $y = f(x)$

(2) The following table gives some values for $y = f(x)$.

x	0	2	4	6
$f(x)$	12	18	30	42

2 pts (−1 for each error)

Make a table for $y = f'(x)$

x	1	3	5
$f'(x)$	3	6	6

at 1 $\dfrac{\Delta b}{\Delta x} = \dfrac{18-12}{2-0} = \dfrac{6}{2} = 3$

at 3 $\dfrac{\Delta b}{\Delta x} = \dfrac{30-18}{4-2} = \dfrac{12}{2} = 6$

at 5 $\dfrac{\Delta b}{\Delta x} = \dfrac{42-30}{6-4} = \dfrac{12}{2} = 6$