1. [10 points] The graph of a portion of the derivative of $b(x)$ is shown below. Assume that $b(x)$ is defined and continuous on $[-5,6]$.


In the following questions, circle all correct solutions.
a. [2 points] At which of the following values of $x$ does $b(x)$ appear to have a critical point?.

$$
\begin{array}{|llll}
x=-4 & x=-3 & x=2 & x=3 \quad \text { NONE OF THESE }
\end{array}
$$

b. [2 points] At which of the following values of $x$ does $b(x)$ attain a local minimum?
$x=-4 \quad x=0 \quad x=2 \quad x=4 \quad$ NONE OF THESE
c. [2 points] At which of the following values of $x$ does $b(x)$ appear to have an inflection point?

$$
x=-3 \quad x=2 \quad x=3 \quad x=5 \quad \text { NONE OF THESE }
$$

d. [2 points] On which interval(s) are the hypotheses of the Mean Value Theorem true for $b(x)$ ?
$[-4,-2] \quad[-2,2] \quad[1,4] \quad[-5,6] \quad$ NONE OF THESE
e. [2 points] For what values of $x$ is $b(x)$ concave up? Write your answer using inequalities or interval notation.

Answer: $\quad(-5,-3) \cup(4,6)$

