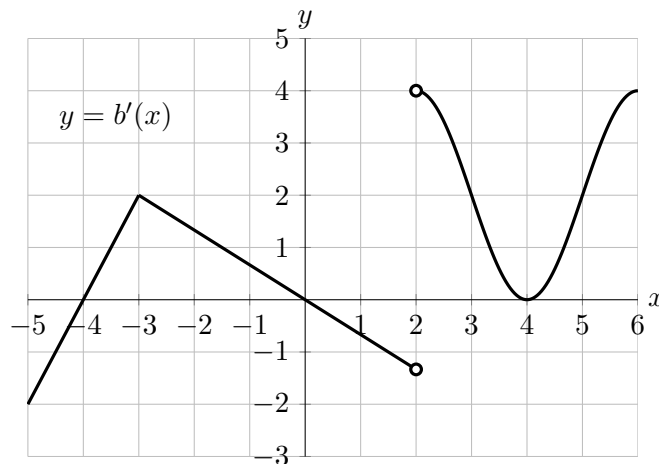


1. [10 points] The graph of a portion of the derivative of  $b(x)$  is shown below. Assume that  $b(x)$  is defined and continuous on  $[-5, 6]$ .



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?.

$x = -4$        $x = -3$        $x = 2$        $x = 3$       NONE OF THESE

- b. [2 points] At which of the following values of  $x$  does  $b(x)$  attain a local minimum?

$x = -4$        $x = 0$        $x = 2$        $x = 4$       NONE OF THESE

- c. [2 points] At which of the following values of  $x$  does  $b(x)$  appear to have an inflection point?

$x = -3$        $x = 2$        $x = 3$        $x = 5$       NONE OF THESE

- d. [2 points] On which interval(s) are the hypotheses of the Mean Value Theorem true for  $b(x)$ ?

$[-4, -2]$        $[-2, 2]$        $[1, 4]$        $[-5, 6]$       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:** \_\_\_\_\_