## Math 1300-010 - Fall 2016

Derivative Function Activity, I - 9/13/16

Guidelines: Please work in groups of two or three. As you finish problems, raise your hand and call me over to check your work. This will not be handed in and is a study resource for the next midterm.

1. Use the given graph to estimate the value of each derivative. The sketch the graph of f' to the right.



(b) 
$$f'(-2)$$

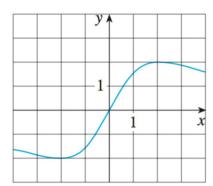
(c) 
$$f'(-1)$$

(d) 
$$f'(0)$$

(e) 
$$f'(1)$$

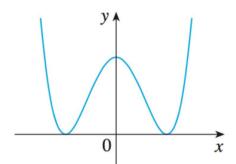
(f) 
$$f'(2)$$

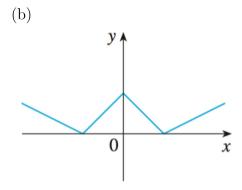




2. Below is the graph of a differentiable function f. Redraw the axes to the right, assuming the same scale, and sketch a graph of f'.

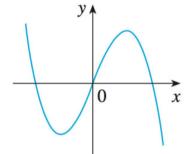
(a)



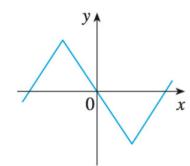


3. Match the graph of each function in (a) - (d) with the graph of its derivative in I - IV. Give reasons for your choices.

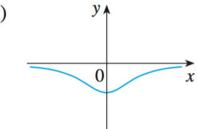
(a)



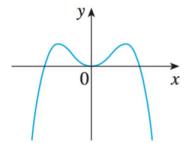
(b)



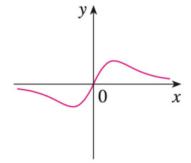
(c)



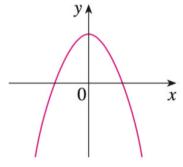
(d)



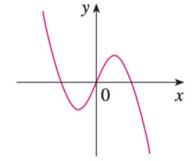
I



II



 $\mathbf{III}$ 



IV

