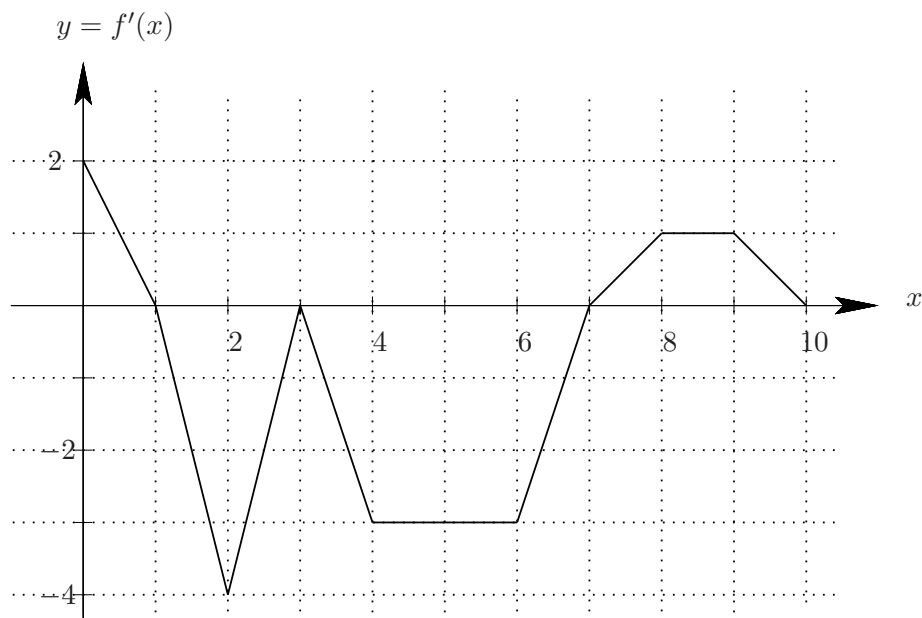


3. (20 points) Use the graph of $f'(x)$ on the closed interval $[0, 10]$ given in the figure below and the fact that $f(0) = 5$ to answer the following questions.



- (a) What is the value of $f(3)$?

$$f(3) = 2$$

- (b) For $0 \leq x \leq 10$, what x value(s) (if any) correspond to local maxima of f (if any)?

$$x = 1, 10$$

- (c) For $0 \leq x \leq 10$, what x value(s) (if any) correspond to local minima of f (if any)?

$$x = 0, 7$$

- (d) For $0 \leq x \leq 10$, what x value corresponds to the global minimum of f and what is the value of $f(x)$ at that point?

$$x = 7$$

$$f(x) = -7$$

- (e) If $H(x) = e^{f'(x)}$, find $H'(1.5)$.

$$H'(1.5) = -4/e^2$$