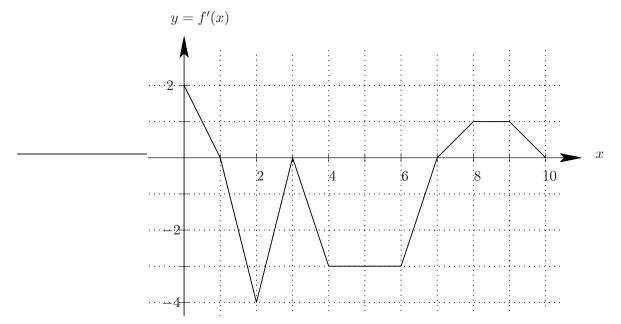**3.** (20 points) Use the graph of $f'(x)$ on the closed interval $[0, 10]$ given in the figure below and the fact that $f(0) = 5$ to answer the following questions.

$y = f'(x)$

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

$$f(3) = \underline{\hspace{4cm}}$$

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

$$\underline{\hspace{4cm}}$$

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

$$\underline{\hspace{4cm}}$$

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

$$x = \underline{\hspace{4cm}} \qquad\qquad f(x) = \underline{\hspace{4cm}}$$

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

$$\underline{\hspace{4cm}}$$