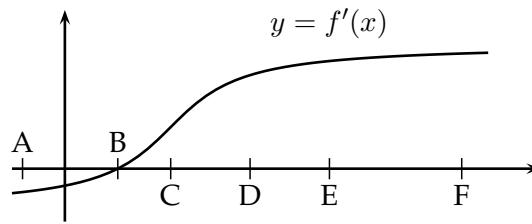


1. (2 points each) Suppose  $f$  is a twice-differentiable function. Use the graph of the derivative  $f'$ , shown below, to answer the following questions. No explanations are required.



- (a) At which of the marked  $x$ -values does  $f$  attain a global minimum on the interval  $[A, F]$ ?

**B**

- (b) At which of the marked  $x$ -values does  $f$  attain a global maximum on the interval  $[A, F]$ ?

**F**

- (c) At which of the marked  $x$ -values does  $f'$  attain a global minimum on the interval  $[A, F]$ ?

**A**

- (d) At which of the marked  $x$ -values does  $f'$  attain a global maximum on the interval  $[A, F]$ ?

**F**

- (e) At which of the marked  $x$ -values does  $f''$  attain a global maximum on the interval  $[A, F]$ ?

**C**

- (f) For which of the marked  $x$ -values does  $\int_A^x f'(t) dt$  attain a global minimum on the interval  $[A, F]$ ?

**B**

- (g) For which of the marked  $x$ -values does  $\int_A^x f'(t) dt$  attain a global maximum on the interval  $[A, F]$ ?

**F**