9. (10 points) The graph of $f'(x)$ (i.e., the derivative of $f$) is given below. Use the graph to answer the following questions:

(a) For which intervals is $f$ increasing?

(b) For which intervals is $f''$ negative?

(c) For which value(s) of $x$ (if any) does $f$ have a local maximum?

(d) For which values of $x$ (if any) does $f$ switch from concave up to concave down?