9. (10 points) The graph of $f^{\prime}(x)$ (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 $f^{\prime \prime}$ 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?
