1. The graph below is a graph of $y = g'(x)$, the derivative of $g$. Use the graph to answer the following questions. You will probably have to estimate some answers.

(a) On what interval(s) is $g'$ decreasing? Justify your answer.

(b) On what interval(s) is $g$ concave up? Justify your answer.

(c) For what $x$-value(s) does $g$ have a stationary point? Justify your answer.

(d) For what $x$-value(s) does $g$ have a local extremum? Justify your answer.

OVER
2. Suppose that \( f(1) = 8 \) and \( f'(x) \leq 7 \) for all \( x \). What is the smallest that \( f(-2) \) could be?

\[ f(-2) \leq 8 - 14 \]

(2) \[ f(-2) \leq -6 \]