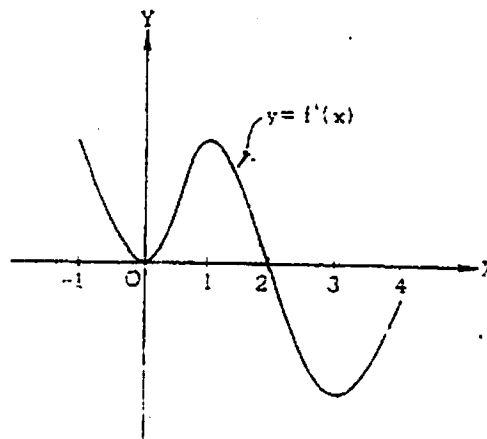


Note: This is the graph of the derivative of f , not the graph of f .

6. The figure above shows the graph of f' , the derivative of a function f . The domain of the function f is the set of all x such that $-3 \leq x \leq 3$.
- For what values of x , $-3 < x < 3$, does f have a relative maximum? A relative minimum? Justify your answer.
 - For what values of x is the graph of f concave up? Justify your answer.
 - Use the information found in parts (a) and (b) and the fact that $f(-3) = 0$ to sketch a possible graph of f on the axes provided below.



Note: This is the graph of the derivative of f , NOT the graph of f .

7. Let f be a function that has domain the closed interval $[-1, 4]$ and range the closed interval $[-1, 2]$. Let $f(-1) = -1$, $f(0) = 0$, and $f(4) = 1$. Also let f have the derivative function f' that is continuous and that has the graph shown in the figure above.
- Find all values of x for which f assumes a relative maximum. Justify your answer.
 - Find all values of x for which f assumes its absolute minimum. Justify your answer.
 - Find the intervals on which f is concave downward.
 - Give all values of x for which f has a point of inflection.
 - On the axes provided, sketch the graph of f .