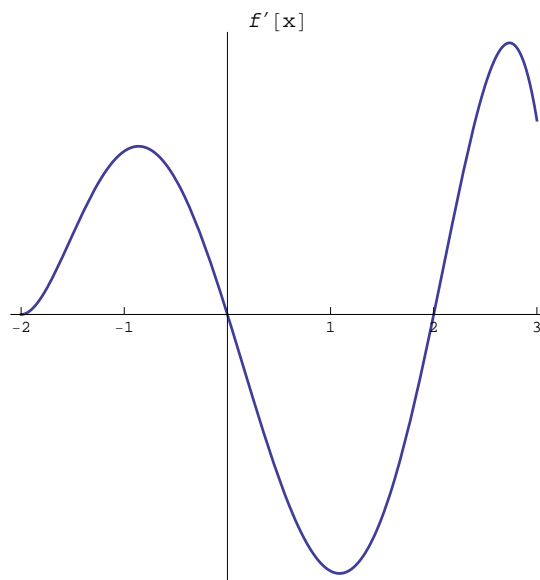


2. [11 points] Given the graph of  $f'(x)$ . Sketch a graph of  $f(x)$  on the provided axes given that  $f(1) = 0$ . On your graph, label any local maxima, minima, and points of inflection. Make sure that the concavity of the graph of  $f(x)$  is visible in your graph.



*Solution:*

$x = 1$ , x-intercept

$x = 0$  local max

$x = 2$  local min

$x = -1, 1, 2.8$  points of inflections

$(-2, -1), (1, 2.8)$  concave up

$(-1, 1), (2.8, 3)$  concave down

