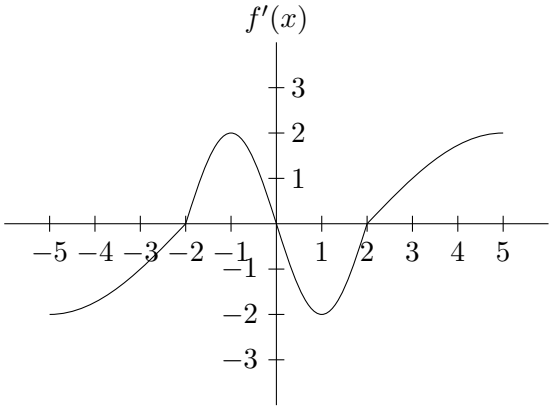
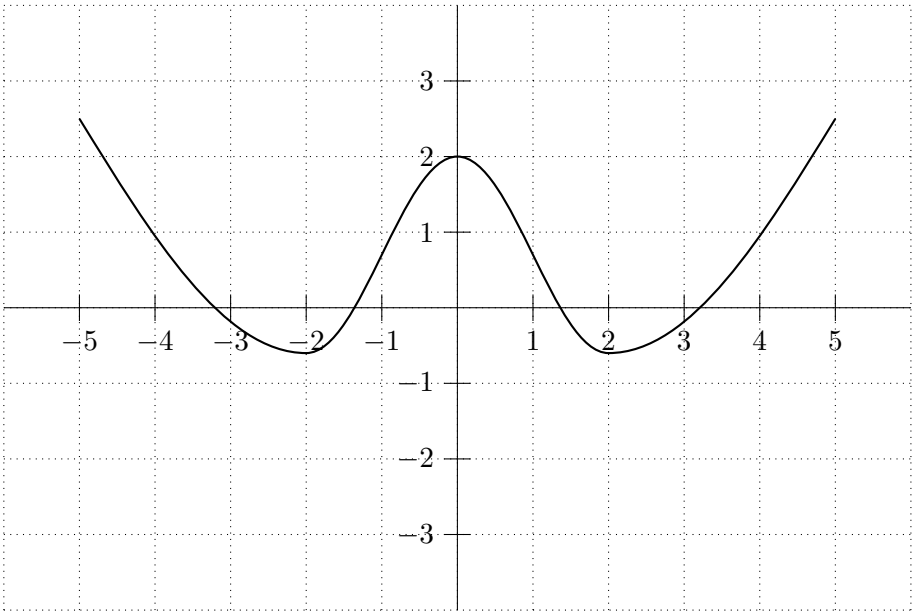
6. [11 points] The graph of $f'(x)$, an odd function defined on the interval $[-5, 5]$, is shown below.



On the blank graph below, draw a graph of $f(x)$, the antiderivative of $f'(x)$ with $f(0) = 2$. Make sure your graph depicts where $f(x)$ is increasing and decreasing and the concavity of the function.



Write the x coordinates of the local minima of $f(x)$ ± 2

Write the x coordinates of the local maxima of $f(x)$ 0

Write the x coordinates of the inflection points of $f(x)$ ± 1