1. Given the graph of $f'(x)$

   a. Where does $f(x)$ have a relative maximum or minimum?

   b. Where does $f(x)$ have an inflection point?

   c. Where is $f(x)$ increasing?

   d. Where is $f(x)$ decreasing?

   e. Give a possible graph of $f(x)$. 
2. Graph \( f(x) = \begin{cases} 
-x + 1, & x \leq -1 \\
-x^2 + 3, & x > -1 
\end{cases} \) in the window \( \text{xmin} = -3, \text{xmax} = 1, \text{ymin} = 0 \text{ ymax} = 4 \)

a. Estimate \( f'(-2) \)

b. Estimate \( f'(-1) \)

c. Estimate \( f'(-0.5) \)

d. Estimate \( f'(0) \)

e. Where is the derivative undefined?

f. Try graphing the derivative.