2. [8 points] On the axes provided below, sketch the graph of a function f satisfying all of the following:

- f is defined and continuous on $(-\infty, \infty)$.
- f has exactly three critical points.
- f has a local maximum at $x = 2$.
- f has a point of inflection at $x = -1$.
- f has a global minimum at $x = 0$.
- $f''(x) > 0$ for $x > 3$.

Remember to clearly label your graph. Please point out the key features.