

Sketching Maxima and Minima

Name:

1. Sketch the graph of a function that has two local maxima, one local minimum, and no absolute minimum.
2. Sketch the graph of a function on the closed interval $[-1, 2]$ that has a discontinuity, an absolute maximum, and an absolute minimum.
3. Sketch the graph of a function that has three local minima, two local maxima, and seven total critical numbers.
4. Make up your own criteria similar to the descriptions in number 1 through 3. Write your criteria below. Swap papers with a fellow mathematician and sketch the graph of their function on the back of their paper.