Exercise 13

- (a) Sketch the graph of a function on [-1,2] that has an absolute maximum but no absolute minimum.
- (b) Sketch the graph of a function on [-1,2] that is discontinuous but has both an absolute maximum and an absolute minimum.

Solution

Recall that for a function to have a local maximum at c, there has to be an open interval about this value. That is, local maxima cannot occur at the endpoints.

Absolute maximum but no absolute minimum

Discontinuous function with absolute maximum and absolute minimum



