

SECTION 4.3: MAXIMUMS AND MINIMUMS

1. local and absolute maximums and minimums: what they are

2. A variety of examples

3. A critical number of $f(x)$ is

4. First, find the domain and all critical numbers. Then, identify all local and/or absolute maxima and minima. Use technology to sketch the graphs and confirm your answers.

(a) $f(x) = e^x(x - 2)^2$

(b) $f(x) = (x - 2)^{2/3} + 1$

(c) $f(x) = \frac{x^2}{(x-1)^2}$