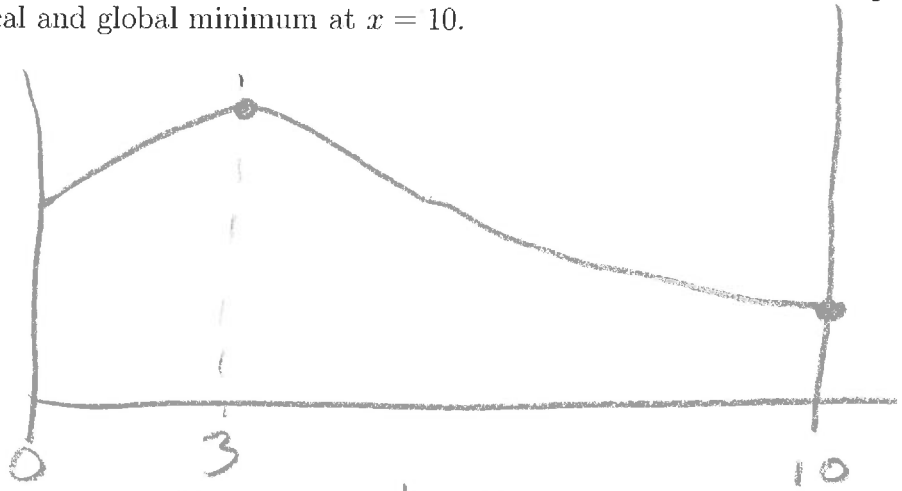
Mathematics 122

Quiz 21 Name: Key

You must show your work to get full credit.

1. Sketch the graph of a function on the interval $0 \leq x \leq 10$ that has a local and global maximum at $x = 3$ and a local and global minimum at $x = 10$.



2. For the function

$$f(x) = 2x^3 - 9x^2 + 12x + 1$$

on the interval $-0.5 \leq x \leq 3$ find

From the graph we see global max. min. at endpoints

The global minimizer $-.5$

The global minimum -7.5

The global maximizer 3

The global maximum 10

Do this with your calculator and make a sketch of the graph here: