

Math 160
Review Sheet for Exam III
Friday 30 March 2012

The exam covers book Sections 3.1-3.5, 3.7. The specific topics are as follows:

1. Relative maxima/minima and absolute maxima/minima. Know the statement of Fermat's Theorem and why the converse is false. Be able to find critical numbers. Be able to find the absolute extreme values of a continuous function on a closed interval. (3.1)
2. Mean Value Theorem. I will ask you to give the precise statement of the Mean Value Theorem, but you will not be required to prove it. You do need to understand how to interpret the Mean Value Theorem in terms of slopes and you should be able to use the Mean Value Theorem to do problems similar to the homework. (3.2)
3. Graphing using the following five steps: I. Find intercepts. II. Find asymptotes. III. Find relative extrema and intervals where increasing/decreasing. IV. Find inflection points and intervals where concave up/down. V. Connect. (3.3-3.5)
4. Optimization (Applied Max/Min) Problems. (3.7)