Reminder: The exam is Friday, April 2.

General Information: The exam will consist of terms to define, computational problems, and the dreaded true/false. It is worth 100 points.

Chapter Four

- Sections studied: 4.1–4.5, 4.7, 4.9
- Terms to know: absolute maximum, absolute minimum, local maximum, local minimum, critical point, Extreme Value Theorem, Rolle’s Theorem, Mean Value Theorem, inflection point, horizontal asymptote, antiderivative
- Skills to drill: be able to find the absolute max/min values of a function; identify the critical points of a function; find the point $c$ guaranteed to exist by Rolle’s Theorem or the Mean Value Theorem; be familiar with the Increasing/Decreasing Test, First and Second Derivative Tests, and Concavity Test; sketch a graph satisfying certain conditions; determine when $f$ is increasing/decreasing, concave up/concave down, has a local max or min, and/or has an inflection point; be able to evaluate limits at infinity and slant asymptotes; be able to identify horizontal asymptotes; be able to carefully and completely sketch a graph of a function; set up and solve optimization problems; given a graph of $f'$ or $f''$, determine properties of the graph of $f'$ or $f$; find the antiderivative of a given function
- Problems to Ponder: Page 282 #1, 3, 5, 7, 11, 13, 17-27(odd), 34, 38, 40, 53–60 (all)

Final Exam Review Sheet Problems

- Consider the following relevant problems from the final exam review sheet: 7cjk, 10, 28–43 all, 53–57