

Calculus I

Exam 3 Review

April 23, 2009

The third exam will cover chapter 5 of Stewart's text. The exam date is Tuesday, April 28 from 11am-12:30pm. The review at the end of chapter 5 provides a good source of problems. Bring your questions to Monday's class.

Definitions and facts to know

- **definite integral** of f from a to b
- properties of the integral

- **Riemann sum**

Theorems to know

- continuity implies integrability
- Fundamental Theorem of Calculus, Part 1
- Fundamental Theorem of Calculus, Part 2
- The Net Change Theorem

Computational problems

- Approximate an area under a curve using rectangles
- Find definite integrals
- Be able to prove simple mathematical statements using mathematical induction
- Know the table of indefinite integrals on page 325
- Find indefinite integrals using the substitution rule

Proofs to know

- FTC Part 1
- FTC Part 2