

Intensive Calculus - Math 134
Spring 2008
Professor Anderson

Exam 1 Information

The first exam is scheduled for Thursday, February 14, 7:00-8:30 PM in SW 359. The exam will be based on problem sets 1 - 3 and quizzes 1 - 4. We will review in class Thursday and Marshall will hold a review session at a time to be announced.

Topics and suggested review problems:

- Basic antiderivative rules (p. 332 # 5, 9, 14).
- Estimation of area under a curve using left, right and midpoint sums; under and overestimates (p. 352 # 1a, 4a, 5c).
- Estimation of distance traveled from velocity using left, right sums; under and over estimates (p. 353 #14, 16).
- Computing left, right and midpoint sums to approximate a definite integral (p. 364 #5, 11).
- General properties of the definite integral (p. 434 #5, p. 366 #43).
- Computing definite integrals using the Fundamental Theorem (p. 434-435 # 9, 16).
- Interpretation of definite integrals in terms of areas (p. 366 #36, p. 435# 37).
- Computing displacement and distance traveled given velocity (p. 436 # 63).
- Interpretation of the definite integral as total change (p. 436 #65, p. 393 #62, p. 375 #51).
- Properties of $g(x) = \int_a^x f(t) dt$ (p. 435-436 # 39, 68ab; p. 383 #4).
- Statement of the definition of $\int_a^b f(x) dx$ (see Quiz 2) and the two versions of the Fundamental Theorem (see Quiz 3).
- Substitution (p.435 # 17, 21,25, 26).
- Integration by parts (p.435 # 22, 23, 24).