Math 15, Exam 2, Feb 17, 2005

Instructions

Calculators may be used on this exam.

However, you must show your work in order to receive credit.

1. Be sure to print your name and your instructor's name in the space provided.
2. Work all problems. Show all work. Full credit will be given only if work is shown which fully justifies your answer.
3. There will be sufficient space under each problem in which to show your work.
4. Circle, box, or underline each final answer. *All final answers must be simplified!*
5. This exam has 4 sheets of paper (front and back). Do not remove the staple! There are 100 points. Each problem is 10 points.
6. Turn off your cell phone if you have one with you.

Get ready for the exam

1. Some formulas will be supplied (see back of this page). You are asked to remember other formulas and techniques from Chapters 7 and 8 and Math 14.
2. Problems will be (directly or slightly modified) from homework problems assigned from Chapter 8.
3. You should be able to do all of the following:
   a. Use integration by parts.
   b. Integrate combinations of trigonometric functions.
   c. Perform trigonometric substitution.
   d. Use the method of partial fractions to integrate rational functions.
   e. Determine whether an integral is convergent or divergent.
4. Required skills from Math 14, Algebra, Trigonometry:
   a. Find areas and volumes using calculus.
   b. Know how to integrate by changes of variables.
   c. Trigonometric identities.
   d. Long division.
   e. Complete the square.

good luck

fingers crossed