

Calculus II Honors Fall 2009
Homework 11 (Review)
Due: NOT TO BE TURNED IN

Instructions: There are no rules. It's Lord of the Flies all over again.

Note: You should try to finish by Wedday, or at least the Friday before the exam. Because I will use Friday and possibly some of Wedday to answer questions you have.

Tips

You should remember the definitions of:

$$\sinh x, \cosh x, \tanh x; \text{ inverse functions (e.g., } \sin^{-1} x \text{)}.$$

You should remember (or be able to easily derive) the derivatives of:

$$e^x, a^x, \ln x, \sin^{-1} x, \cos^{-1} x, \tan^{-1} x.$$

You should remember (or be able to easily derive) the integrals of:

$$e^x, a^x, \frac{1}{x}, \ln x, \tan x, \sec x, \sqrt{x^2 + 1}, \frac{1}{x^2 + 1}, \frac{1}{\sqrt{x^2 - 1}}, \frac{1}{\sqrt{1 - x^2}}.$$

Exercises

Chapter 7 Review.

Concept Check: 1, 2, 3, 4, 5, 6, 8

Exercises: 1, 11, 12, 29, 32, 40, 45, 69, 74, 76

Chapter 8 Review.

Concept Check: 2, 3, 6, 7, 8

Exercises: 1, 3, 4, 5, 7, 9, 11, 12, 13, 16, 17, 18, 21, 22, 23, 24, 25, 41, 42, 43, 45

Review Homeworks 6–10