Math 120 – Week 6 Assignments Spring 2003

Monday February 24 Class 12:

More Antiderivatives and Indefinite Integrals. We shall learn more examples of antiderivatives of the elementary functions.

 $\frac{\text{Homework }\#7\text{: }(3\text{ points})}{Smith\ \mathcal{C}\ Minton, \text{ pages }332\text{-}333\text{: }9,\ 11,\ 22,\ 29,\ 41,\ 42}$ Due on Wednesday in Class 13

Wednesday February 26 Class 13:

Introduction to Integration By Substitution. We shall analyze the Chain Rule for Differentiation and see how the analogous rule for antidifferentiation leads to the technique of Integration by Substitution.

Homework:

Quiz #4: Part 3 of the Fundamental Theorem of Calculus Due in $Class\ 14$

Thursday February 27 Lab 3:

<u>Patterns of Antiderivatives.</u> We shall establish rules for antidifferentiation by considering a large number of antiderivatives and observing patterns.

Friday February 28 Class 14:

<u>Integral Exchange</u>. We shall see how integration by substitution allows us to exchange or trade one apparently hard definite integral for an easier definite integral.

Homework #8: (6 points) $Smith \ \mathcal{E} \ Minton$, pages 382-383: 5, 9, 16, 28, 50, 67 Due on Monday in Class 15