

Math 120 – Week 4 and 5 Assignments Spring 2003

Monday February 10 *Class 9:*

The Fundamental Theorem of Calculus. We shall learn how to compute the integral of a derivative and the derivative of an integral (accumulation function).

Homework #5: (5 points)

Smith & Minton, pages 372-373: 6, 8, 45, 50, 58
Due on Wednesday in *Class 10*

Wednesday February 12 *Class 10:*

Understanding the Fundamental Theorem of Calculus. We shall increase our understanding and familiarity with the first two parts of the Fundamental Theorem of Calculus. Summarize our known Antiderivatives.

Thursday February 13 : *Lab 3*

Bring your questions about the Exam to your lab section today. Exam Review session! Continue with Lab # 2

Friday February 14 *Exam 1:*

Good Luck!

Math 120 – Week 5 Assignments

Monday February 17 : President's Day Holiday (NO CLASS)

Wednesday February 19 : Professor Absent (CLASS CANCELLED)

Thursday February 20 : *Lab 4*

Exam 1 returned.

Friday February 21 : *Class 11*

Part 3 of the Fundamental Theorem of Calculus. We shall learn that accumulation functions can solve initial value problems.

Homework #6: (4 points)

Use the Fundamental Theorem of Calculus to find the following functions:

- (a) The function(s) $y(x)$ whose derivative is exactly equal to $\cos(2x)$
- (b) The function(s) $y(x)$ whose derivative is exactly equal to $\sin(x - 4\pi)$
- (c) The function $y(x)$ whose derivative is exactly equal to $\sqrt{x} = x^{1/2}$ and goes through the coordinate $(1, 2)$

Due on Monday in *Class 12*