

Math 120 – Week 13 Assignments Spring 2003

Monday April 21 *Class 33:*

Radius of Convergence and Intervals of Convergence. We shall discuss the concept of determining for what values of x does a Taylor Series for a function $f(x)$ at a point $x = a$ converge exactly to the function value.

Wednesday April 23 *Class 34:*

Introduction to Fourier Series. We shall be introduced to a new type of series which converges to a periodic function everywhere.

Homework:

Quiz #11: Intervals of Convergence

READING: *Smith & Minton* Section 8.6 (pages 674-681)

Due on Friday in *Class 35*

Thursday April 24 *Lab 8 :*

Fourier Series. We shall use DERIVE to help us investigate and compute the Fourier Series approximation of a periodic function.

Friday April 25 *Class 35 :*

Using Fourier Series. Examples of using Fourier Series. Comparisons with Taylor Series.

Homework #17: (5 points)

Smith & Minton, page 716: 5, 7, 9, 25

READING: *Smith & Minton* Section 8.9 (703-715)

Due on Friday in *Class 36*