

# Math 5021, Fall 2013

## Assignment 8, 7 November 2013

**PROGRESS:** We are finishing Chapter 4.

**DUE:** This assignment is due THURSDAY, 14 November at the start of class.

**Read:** Problems (not Exercises) 2 and 3 at the end of Chapter 4. Problem 2 is a first glimpse at how Fourier transform techniques are used in solving differential equations. Problem 3 presents the Three Line Theorem which is a technical extension of the maximum principle which turns out to give exactly the estimates needed in certain problems. It is, for instance, a basic tool in developing the theory of complex interpolation of linear operators.

**PROBLEMS:**

Pg 153- : 2, 3, 8, 10, 15