## 18.103 HOMEWORK #5

## DUE FRIDAY, OCTOBER 14TH AT 3PM IN 2-267

## 1. Reading and Practice

Read and review Chapter 1.1 and 1.2 of Real Analysis by Stein and Shakarchi up through the section on Exterior Measure. Also read the section on construction of a non-measurable set at the end of Section 1.3. *Fourier Analysis*.

## 2. Exercises to be handed in

Do Exercises 1, 2, 3, 11, 15, 33 in Chapter 1 of Real Analysis; Measure Theory, Integration, and Hilbert Spaces by Stein and Shakarchi.