## Math 524

## Homework due 10/27/10

**Reading from Stein & Shakarchi:** Chapter 1, §4. Chapter 6, §1, §2.

Exercises from Stein & Shakarchi: Chapter 1: 16,17, 21, 28, 29.

Chapter 6: 1 (Please note that you also need to assume that  $\mathcal{M}$  is closed under finite intersections.)

**Note:** Several of the exercises above have hints. Make sure to prove the steps of the proof that appear as a hint.