Problem Set 10 Due Thurs. April 5

Lectures 16, 17

Since some in the class will be preparing for qualifying exams the weekend of the 7th, suggestions will be put up early. For those taking the math qualifying exam on that weekend, you will have the option of turning in a final version of this problem set on Monday, April 9. However, in this case please spend time beforehand looking over these problems.

- 1. Reed and Simon, problem IV.10.
- 2. Reed and Simon, problem 11 in Chapter IV.
- 3. Reed and Simon, problem 15 in Chapter IV (To do this properly you need to identify the points $\pm \pi$ as the same point, i.e., as if the interval were wrapped into a circle. Notice that all functions in \mathcal{A} will have to have the same values at these endpoints).
- 4*. Chapter IV, problem 16
- **5.** Chapter IV, problem 19
- **6.** Chapter IV, problem 20
- 7. Chapter IV, problem 31