Kiril Datchev MA 546 Spring 2025

Homework 4

Due February 12th on paper at the beginning of class. Please let me know if you have a question or find a mistake. The book is Reed and Simon's *Functional Analysis*.

- 1. Do problem 21 from Chapter II. (Assume that μ is a probability measure.)
- 2. Do the three exercises at the top of page 2 of https://www.math.purdue.edu/~kdatchev/ 546/meanergodic.pdf, and also the exercise at the top of page 3.