

207 Homework #4 Due Wednesday, Oct 25.

- I. Read Pugh, Chapter 4, Sections 1-3 and Section 8. Read the proof of Baire's theorem (Thm 32) on pages 256-258.
- II. Chap 3: [52 ] (warmup) 39, 42, 43.
- III. Chap 4: [1, 2, 22] (warmup), 4 (a), 8, 9, 14, 23 (a)-(c).
- IV. Do prelim problems on pages 270ff: 8, 12 (**Hint:** consider a point where the maximum of  $|f(x)|$  is attained – why does such a point exist?), 20.