

Part I: Read and Respond (prepare for class Monday, April 7)

Carefully read Section 4.4, taking notes for yourself and answering the following questions to turn in as your Part I assignment. Review the syllabus for parts (a)–(c) that should be included in this assignment.

Reading Questions

1. In the proof of Theorem 4.4.1, why is our goal to find a subsequence (y_{n_k}) that converges to a limit also in $f(K)$?
2. What is the difference between continuity and uniform continuity?
3. Just curious: do you remember the Extreme Value Theorem from calculus?

Part II: Exercises (prepare for class for Monday, April 7)

1. Exercise 4.3.1a

Part III: Problems (due Wednesday, April 9 at the beginning of class)

No more Part IIIs this week. You may turn in an extra revision this week if you'd like.