

Due: Wednesday, November 14th

1. Exercise 5.5.I in the text.
2. Read Corollary 5.6.3 and do Exercise 5.6.F in the text.
3. Exercise 5.7.H in the text.
4. (A problem from the June 1999 Analysis Qualifying Exam.) Let f be a real uniformly continuous function on the bounded set $E \subseteq \mathbb{R}$. Prove that f is bounded on E . Show that the conclusion may be false if boundedness of E is not assumed.