

Math 131A-1: Homework 5

Due: February 6, 2015

1. Read Sections 12, 14-15 in Ross.
2. Do the the exercises in 11.2-4 in Ross for the sequences a_n , b_n , u_n , x_n , and z_n .
3. Do exercise 12.3(a), (b), (c), and (g) in Ross.
4. Do exercises 11.5, 11.9(b), 12.4, 12.6, and 12.10 in Ross.
5. Let (s_n) be a sequence of real numbers. Prove that the set of subsequences of (s_n) is uncountable. [Hint: show that every real number in $(0, 1)$ determines a subsequence of (s_n) .]