Math 131A-1: Homework 5

Due: April 29, 2016

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).]