## Math 131A Lecture 6: Homework 2, Due 4/15 in TA session

1-4: Section 4: 4.7, 4.8, 4.12, 4.14.

5: Show that  $\inf S = -\sup(-S)$  for any nonempty subset of  $\mathbb{R}$ , including the case where the infimum of S is either  $\infty$  or  $-\infty$ . Note that in class we only proved this statement when S was bounded.

6: Section 7: 7.4

7-9: Section 8: 8.4, 8.9, 8.10