

Written Assignment 5 (due 2/08/13 by end of class)

Exercise 1: Let  $X$  be an ordered set in the order topology. Show that  $\overline{(a, b)} \subset [a, b]$ . Then provide an example where equality does not hold (and prove that equality does not hold for your example).

Section 17: # 2, 6, 7, 11 (In # 7 from the text, you are asked to criticize a “proof”. Make sure to clearly explain the logical error(s), not just provide a counterexample.)