

201B Real Analysis
Assignment 7

1. B-5 #1 (do this one last), 4, 7, 8, 14, 15.
2. Prove that there is no function on $[0, 1]$ continuous at rationals and discontinuous at irrationals. Hint: use *the oscillation of the function at a point*. It is positive if and only if the function is not continuous at the point. Utilise this fact and try to apply the Baire's lemma.