

## STAT 205 Homework 4 (Due: Monday, October 30, 2017)

Instructor: Shiwen Shen

Total Points: 70

1. Exercise 7.2.17 in page 240. Use R to do the two-sided t test. Write out the null and alternative hypotheses clearly, and interpret your conclusion properly. Don't forget to check the normality with QQ-plots. (20)
2. Exercise 7.3.4 in page 248. (10)
3. Exercise 7.10.8 in page 299. Use R, write out the null and alternative hypotheses, and make interpretation. (20)
4. Exercise 8.4.5 in page 330. (Hint: "directional alternative" means we want to test whether valproate would significantly decrease the overall numbers of minor seizures.) (10)
5. Exercise 9.2.6 in page 365. Use R. (10)