

STA 442/1008 Quiz 5

1. (2 Points) You did an analysis to determine whether, just at day 12, there was a difference between Drug and Placebo in force required to extract the tooth.

- a. Give the value of the F statistic. Your answer is a number.
- b. Consider this F-test as a Scheffé follow-up to the initial test comparing eight means. What critical value are you using? Your answer is a number.
- c. Is the Scheffé test statistically significant at the joint 0.05 level? Answer Yes or No.
- d. Look at the two sample means you are comparing. Clearly state what happened.

2. (8 Points) The reason for doing the bunnies study was to find out if the drug helped dental implants become more firmly attached to bone. Based on the results of your statistical analysis (and **only** on the results of your statistical analysis), would you recommend proceeding to clinical trials with humans? Answer Yes or No and briefly explain. You can get full marks for a single sentence with no numbers and no statistical terminology. You have more room than you need.

Please attach printouts of your log file and your list. Make sure your name is written clearly on both files.

Total Marks = 10 points