

Name _____

Student Number _____

University of Toronto Mississauga

STA442/1008 2012

QUIZ 3

1. (3 Points) Give the following numbers from your printout.
 - (a) The number of houses with thermal vent dampers. (50)
 - (b) The percentage of houses that are Bi-level. (6.67)
 - (c) Mean energy consumption with vent damper inactive. (10.8131111)

2. (7 Points) In the furnace study, we want to know whether on average, there is significantly more energy consumption with the damper in (active) or the damper out (inactive).
 - (a) What is the value of the test statistic? The answer is a single number from the printout. ($t = 11.87$)
 - (b) What is the p -value? The answer is on the printout. ($p < .0001$)
 - (c) Do you reject the null hypothesis at the 0.05 level? Answer Yes or No. (Yes)
 - (d) Are the results statistically significant at the 0.05 level? Answer Yes or No. (Yes)
 - (e) In plain, non-technical language, what do you conclude, if anything? Say something about energy consumption and vent dampers. Statistical terminology is *absolutely* not allowed here. This means you get *no marks* if you use words and phrases like “variable” or “null hypothesis” or “statistically significant.” (Average energy consumption is greater with the vent damper inactive.)

Please turn in your log file and your list file with the quiz. Make sure your name and student number are written on them.