Lab Project #3

Refer to the class data page for this lab. This lab should be done on another sheet of paper. Use our class as an appropriately random sample. SHOW ALL YOUR WORK.

Due at Exam 3.

1) Separate our class data into a sample of men and a sample of women. Test the claim that the mean age for men at Cabrillo is less than the mean age of women at Cabrillo. Use a 5% significance level.

2a) For our entire class, make a scatterplot of the number of minutes it takes to get to school (x, from question 14) and the number of miles to campus (y, from question 15). What is \( r \)? What is the equation of the regression line? Plot the regression line on your scatterplot.

2b) Now do the same thing using units taken (x, from question 11) and monthly housing cost (y, Question 12). What is \( r \)? What is the equation of the regression line? Plot the regression line on your scatterplot.

2c) Which of the two questions (2a or 2b) has a stronger correlation? Why do you think that happened?

2d) Do both parts a) and b) actually have correlation? Justify using appropriate hypothesis tests.