

Statistics 110/210

Homework assigned 10/22/08

Using the data for problem 6.9 in the textbook, do the following:

1. Make appropriate plots before running a regression analysis. Comment on whether you see any problems.
2. Even if you thought there were problems from step 1 (this isn't a hint as to whether or not you should have found any), use all of the data to perform a regression analysis. Write out the regression equation you found.
3. Interpret the results, including:
 - Interpretation of each of the coefficients in the context of this example
 - A test for each coefficient, with an explanation in words of the test and the results
 - R^2 and what it means
 - Root MSE and what it means
 - An overall test for whether regression is useful in this example
4. Provide appropriate plots of residuals and comment on them.