Problem Set 7
Econometrics 410
Prof. Taber
Due: Thurs April 7

Problem 1. Wooldridge 5.3

Problem 2. Wooldridge C5.1

Problem 2. Wooldridge C5.2

Problem 3. First just do Wooldridge C6.8 part (i). Now suppose rather than running the regression with price measured in dollars supposed you used price in $1000 of dollars, suppose you used price in terms of dollars. What would you expect to get? Now run the regression that way. Similarly what would you expect if you measured lotsize in terms of acres (an acre is 43,560 square feet). What do you get? Now run the regression in stata.

Problem 4. Wooldridge C6.6 (the last part says it requires calculus, but it is almost exactly what we did in class)

Problem 5. Wooldridge C6.12

Problem 6. Pick any data set in Wooldridge that you would like and think about the forecasting problem. Divide your sample size into a regression sample and a testing sample. Run a number of different specifications in the regression sample and then test the $R^2$ in the testing sample. Which model fits best? Can you find a specification that “overfits” the data.