

BOSTON COLLEGE  
Department of Economics  
EC 228 01 Econometric Methods  
Prof. Baum, Mr. X. Chen, Fall 2012

Problem Set 1  
Due at classtime, Tuesday 18 September 2012

Problem sets should be your own work. You may work together with classmates, but if you're not figuring this out on your own, you will eventually regret it. You may find it useful to review Wooldridge (4th ed.) Appendix C before attempting these problems.

1. Appendix A, problem A.7
  2. Appendix B, problem B.2
  3. Appendix B, problem B.5
  4. Appendix C, problem C.1
  5. Appendix C, problem C.6
6. You must use Stata from <http://apps.bc.edu> to do the following problem, which makes use of the Wooldridge dataset `wage1`. To load it into Stata, give the command `bcuse wage1`. If you are using a personal copy of Stata, you must `sec install bcuse` once, and then that command will be accessible.
- Hand in a printout from Stata, annotated with your comments.** (It would be easiest if you would create a single do-file which answers all the questions and produces a single printout). The 'log' icon in the Stata toolbar may be used to create a file containing both your commands and Stata's response. Use the 'Viewer' within Stata to examine and print the log.
- The `wage` variable is measured in dollars and cents.
- (a) How many females are there in this dataset?
  - (b) What is the average wage earned by a female?
  - (c) What is the median wage earned by a female?
  - (d) How many nonwhites are there in this dataset?
  - (e) How much more or less do nonwhites earn, on average, than whites?
  - (f) Is the difference between average white and nonwhite wages statistically significant?

Hints: within Stata, `help tab`, `help summarize`, `help ttest`