Today's daily problem introduces you to a few very basic Stata commands that will be demonstrated in Monday's class and that you will use over and over this semester. You may find the information you need in order to answer the questions in Stata documentation (perhaps the User's Guide volume) either in paper form or through Stata's online Help menu. Or you may use the Adkins and Hill *Using Stata for Principles of Econometrics* volume that accompanies the text (and is available on reserve). To help you find the right documentation, I have included the name of the required Stata command in parentheses at the end of each task.

Write a Stata command to perform each of the following tasks:

- Create a new variable z that is equal to the product of existing variables x and y. (generate)
- Show basic summary statistics for $x, y,$ and z. (summarize)
- Run a regression in which y is the dependent variable and x is the independent variable, using only observations for which $x > 0$. (regress)
- Put the residuals from a regression into the variable *ehat*. (predict)
- Create a scatter-plot with *ehat* on the vertical axis and x on the horizontal. (scatter)