

# Data Exercises

## Chapter 7 Dummy Variables

1. Create two dummy variables for country of origin in the CARS file. One for USA (=1 if the car is American and 0 otherwise) and one for JAPAN (=1 if the car is Japanese and 0 otherwise). Here is a suggested way to do this:

Go to the Transform menu and click on Compute.  
In Target Variable put Japan and in the Numeric expression put 0.  
Click on Ok.

Do the same but with USA instead of Japan this time.  
Now you must go back to the Compute command and use it to set the Japan variable =1 if origin =3.

Repeat the last step but with the USA variable set to =1 if origin=1.

You should now see the USA and Japan dummy variables in the spreadsheet.  
If these dummies are 0 or 1 all the way down then you have made a mistake in Question 1 and the next part will not work.

2. Now estimate the linear model, the double-log model and the quadratic in weight model with the Japan and USA dummies added on to them.
3. Examine the 't' tests for each variable in the three regressions making sure you know the correct number of degrees of freedom.
4. Interpret the coefficients on the two dummy variables for each regression.
5. Compare the results for the pair of dummies across the three different regressions.