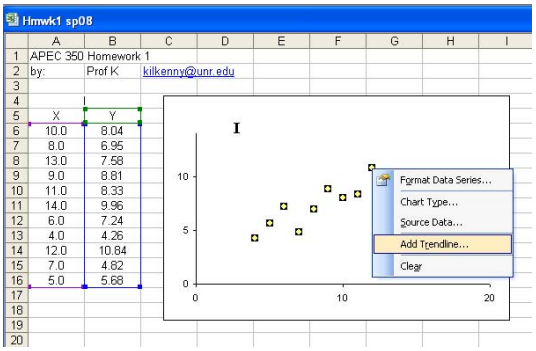
RECO 250 Homework 1 DUE August 26, 2009

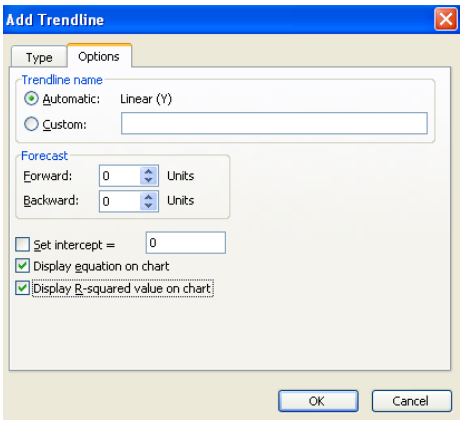
1. Use EXCEL: enter all the data shown on page 13 of Tufte's book.

2. Reproduce the plots shown on Tufte's page 14.

3. Using EXCEL, find the linear *regression line* in each graph*.



*use OPTIONS to display the equations and the R^2.



4. a. **Copy/Paste a copy** of your graph of **data set II**, change the graph title to "IIb", and replace the linear trend line with a non-linear one; display the equation and the R^2.
b. ***DISCUSS:*** How did the R^2 for the regression in IIb compare to the R^2 for Tufte's regression II?

5. a. Copy/Paste data set III, relabel it "IIIb", delete the *outlier* (the stray data point), plot it, fit a new linear equation to the remaining data; and display the equation and the R^2.
b. *DISCUSS:* How did the R^2 for the regression in IIIb compare to the R^2 for Tufte's regression III?

REQUIRED Details:

- Put **your name, the date, and your e-mail address** in cells A1-A2-A3
- Put a title (e.g., "Anscombe's Quartet" or RECP 250 Homework 1) below that (e.g., in cell A4).
- Save your file with a unique, mnemonic **filename** like "250H1myintitals" that is, the course number "250", "H1" for homework 1, and YOUR own initials.
- Write your ***DISCUSS****ions* in a cell (FORMAT the cell to WRAP, if necessary).
- LAY OUT your tables and graphs so that they LOOK GREAT and PRINT OUT NICELY on 1-2 pages.
- Turn in the printed-out HARDCOPY. (No hardcopy = no credit.)

You may also e-mail your homework to kilkenny@unr.edu *before* noon on the due date.