

QUANTITATIVE METHODS

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Assignment 10

This assignment is due *Wednesday February 23, 2005*.

Question 1 (20 points)

Go on the Web and find *paired data* on a subject of your choice so that you could examine the relationship between the two variables. (You can make use of Google to find different web sites).

With the data that you find, do the following, using Excel.

- Find the equation of the least-squares line.
- Find the correlation coefficient and the coefficient of determination.
- Draw a scatter diagram that includes the best-fit line.

Once this is done, open a Word document and do the following:

- Give a short description of your data (what it is about).
- Indicate where you found your data (the address of the web site is required).
- Copy the results from Excel (the equation of the line, the correlation coefficient and the coefficient of determination, and the graph).
- Answer the following questions:
 1. How would you best describe the correlation between the two variables (positive or negative, perfect, high, moderate, low or null).
 2. What can you conclude about the relationship between the two variables? (Example: A correlation of 0.85 between height x and weight y is obtained: then the relationship would be that in general, the taller a person is the more that person weighs).
 3. Does knowing the value of one of the variables help you “predict” the value of the other in an accurate way?
- Make sure that your results are well presented. (Clarity, presentability, neatness, ect..)

You must hand in a printout of the word document.

As usually, you must send your Excel work by e-mail.