

QUANTITATIVE METHODS

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Assignment 20

This assignment is due **Monday April 18, 2005**.

A copy of your Excel work must be sent by *e-mail* and a printed copy of your work in Word must be handed in.

Question 1 (10 points)

Go on the Web and find data for a subject of your choice (be original!) from which you can build a confidence interval for the mean.

With the data that you find, use Excel to construct a 95% confidence interval.

Once this is done, answer the following questions in a Word document:

- i. What is your data about? Give a short description.
- ii. Indicate where you found your data (the address of the web site is required).
- iii. Write a conclusion (that is, Step 5)
- iv. Give a critical judgment to your results. You may want to look at the following questions:
 - o Is the sample random?
 - o What is the population to which you can generalize?
- v. How could your results be improved? Give two different ways.
- vi. Make sure that your results are well presented (clarity, presentability, neatness, ect..)

Note: There is no need to copy your data in Word.

Question 2 (10 points)

Go on the Web and find data for a subject of your choice (be original!) from which you can construct a confidence interval for a proportion.

With the data that you find, construct a 99% confidence interval (follow the 5 steps). This can be done in Excel.

Once this is done, answer the following in a Word document (the same as for question 2):

- i. Give a short description of your data (what it is about). What does p represent?
- ii. Indicate where you found your data (the address of the web site is required).
- iii. Write a conclusion (that is, Step 5).

Example for Assignment 24.

Q1

Proportion of DVD's sold at Amazon rated 4* or over is 80%.

Q2

DVD's, Rating (G, PG or PG13, R or NR) and Customer Review (1 to 1.9*, 2 to 3.9* and 4 to 4.9*)

Note: classes must be mutually exclusive: A DVD cannot be counted in more than one place.

Classes must be all inclusive: Any DVD will fit into a cell.

| | | Rating | | |
|--------------------|-----------|------------------|---|-----------|
| | | G, PG or PG – 13 | R | Not Rated |
| Customer Review | 1 – 1.9 * | | | |
| | 2 – 3.9 * | | | |
| | 4 – 4.9 * | | | |