

The homework is due Monday 2/9. The lab is due in your lab on 2/4 or 2/6.

Lab #1 to be done in the computer lab on 2/4 or 2/6

Place your name on an otherwise blank tab and turn the file in on Moodle. All of your answers must be on the computer file turned in. Failure to follow these instructions will cost you a point.

1) (20 points) From the tab "Question #1" on the Excel© file, calculate the arithmetic mean, standard error, median, mode, standard deviation, variance, kurtosis, skewness, range, minimum, maximum, sum, count, 4th largest, 4th smallest, and 90% confidence interval. Create a textbox. Inside the box, explain what those statistics mean about the distribution. You should mention every statistic.

2) (20 points) From the tab "Question #2" on the Excel© file, calculate the arithmetic mean, standard error, median, mode, standard deviation, variance, kurtosis, skewness, range, minimum, maximum, sum, count, 4th largest, 4th smallest, and 90% confidence interval. Create a textbox. Inside the box, explain what those statistics mean about the distribution. You should mention every statistic.

3) (10 points) A) Use the tab "Question #3" to calculate the average rate of return on the stock market from over the past 15 years. The NASDAQ closed at 4637.99 on 2015/1/30 and at 2068.20 on 2005/1/30. B) Calculate both the arithmetic mean geometric mean of the data provided. Calculate the weighted average where the weights start at 1 and double each time. In other words, the first data point has a weight of 1, the second one has a weight of 2, and the third one has a weight of 4, etc.

Homework #1 Due 2/9

Place your name on the back of this sheet of paper and nowhere else. Staple your answers face up on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

1) (15 points) What is meant by *extraneous variables (EV)*? Explain why they are best treated as a *control variable (CV)*. Why might they be a *confounding variable (CFV)*?

2) (10 points) Give an example (not from the book or from the lecture) which illustrates why an *operational definition* must be well defined.

3) (15 points) What is meant by an *ex-post factor evaluation*? What type of question is best answered by that? Explain your logic. What is the big problem with this type of evaluation?

4) (10 points) Why is the method of getting data extremely important? Give an example (not from the book or the lecture) which illustrates your point.