

Math 263-007 Excel Assignment # 1
Due 1/22/15 in class or to my office before 5:30PM.

Instructions For this assignment, you will download the data file **263HW1Dat.xlsx** from the course website. Using this data set, follow the instructions below to produce a computer print-out which you will turn in (no emailed assignments, please). You can hand write any responses that do not require a computed generated chart or table. Make sure to include a clear heading at the top of the assignment, like this:

Nick Henscheid, Math 263 Excel HW 1

If you have any issues with excel, I will be in my office (Math 702) on Wednesday from 3-6PM.

Problem 1. The data set contains the life expectancies of 181 countries, as calculated by the UN.

- (a) Your first task is to generate a histogram chart of the life expectancy variable.
- (i) Use a bin width of 5, with your first bin being 40-45 and your last bin being 80-85.
 - (ii) Label your axes appropriately, given the context of life expectancy
 - (iii) Add data labels for each bar by right clicking on a bar and selecting 'Add Data Labels'
 - (iv) Remove the gap between bars by right-clicking a bar, selecting 'format data series', and changing the gap width.

Copy and paste the resulting chart into your answers.

- (b) Based on the data given and histogram, are the following statements true or false? Give a brief justification.
- (i) 'The tallest bar represents the fact that between 70 and 75 countries have a life expectancy of 49.'
 - (ii) 'More than half the countries represented have life expectancy of more than 70 years.'

Problem 2. Using the following excel commands:

Mean	=AVERAGE(cells)
Median	=MEDIAN(cells)
Standard Deviation	=STDEV(cells)
Percentile Rank of a value.	=PERCENTRANK(cells,value)

- (i) Find the mean of the data set and interpret in the context of life expectancy
- (ii) Find the median
- (iii) Find the standard deviation

- (iv) Find the percentile rank of the US life expectancy
- (v) Explain in words how the relationship between the mean and median relates to the shape of the histogram
- (vi) Explain in the words what the percentile rank of the US life expectancy says.