**Paper item 3.d. Percentage of observations that fall within 1, 2, and 3 St. Dev. of the Mean**

(This document is available as a .docx to download from Kathryn’s website so you can easily include this information in your paper.)

You will need to compute 6 values for each sample: the mean plus and minus 1 St. Dev, plus and minus 2 St. Dev, and plus and minus 3 St. Dev. Then, count up how many of your observations in your sample lie between these values, divide by the total observations in that sample, and multiply by 100 to get the percentage.

Important! I am NOT looking for the empirical rule! I want to know your specific percentages for your data.

The following set up may be helpful in finding these percentages.

Sample 1:

$\overline{x\_{1}}-s\_{1}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of observations between these values: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{1}}+s\_{1}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Percentage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{1}}-2s\_{1}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of observations between these values: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{1}}+2s\_{1}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Percentage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{1}}-3s\_{1}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of observations between these values: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{1}}+3s\_{1}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Percentage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sample 2:

$\overline{x\_{2}}-s\_{2}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of observations between these values: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{2}}+s\_{2}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Percentage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{2}}-2s\_{2}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of observations between these values: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{2}}+2s\_{2}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Percentage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{2}}-3s\_{2}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Number of observations between these values: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

$\overline{x\_{2}}+3s\_{2}=$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Percentage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_