

Instructions: This quiz is to be completed entirely in class. You may not use cell phones, and you may only access internet resources you are specifically directed to use. Go to Blackboard and open the data file posted under Quiz #1. Use it to answer the following questions. Place your answers to the bolded questions directly on this page.

1. In sheet #1, is data collected for an environmental survey. One column notes the number of children living in the household from 0 children to 3 children. Use the COUNTIF function to construct a table of counts for each of the values in the Children column and replace the labels with the words for the numbers (i.e. 0 → Zero, etc.). Use that data to create a pie graph. **What number of children is most represented in this data? What percent of the employees do they represent? Calculate a mean number of children for this data (from the summary table).**

Two = 42%

Mean = 1.31 children

2. Data on employees from Beta Technologies is listed on sheet #2 in the data file. **Calculate the following values regarding salary and record the answers below.**

a. Mean \$ 71,274.51

b. Median \$ 68,400

c. Interquartile Range \$ 35,075.00

d. 24th Percentile \$ 49,844.00

e. Standard Deviation (sample) \$ 30,252.54

- f. According to the empirical rule, 95% of the data should be between what two values?

\$ 10,769.44 and \$ 131,779.58

3. Use the data on sheet #3 to create a time-series graph the percent change of the S&P 500 (do not include the index value). **What do you notice about the data over time?**

most of the time % stays between -0.1% and

+0.05% but there are occasional

periods of volatility w/ more than 0.1%

increase or -0.2% decrease