Instructions: This portion of the exam is to be answered based on your Excel work that you completed at home. Submit this document with your answers along with the Excel file upon which the answers are based. Part II of the exam will be completed in class.

To complete this portion of the exam, you will need the Excel file **154exam1data.xlsx** also posted in Blackboard. You should perform any calculations in Excel, and then write your answers to the bolded questions directly in the Word document. You may need to copy and paste graphs here as well.

1. Using the data on Sheet 1, write an IF statement that determines if the value in Column A is greater than 40. The outputs of the IF statement should be 1 (TRUE) or 0 (FALSE), and then use a SUM formula to count the number of values that satisfy the condition. **Write your IF statement below that appears in cell B1, and the total number of values in the list that are greater than 40.** (4 points)

2. On Sheet 2, there is a table of values expressed in percent, decimal, fraction and scientific notation. Complete the table by filling in the missing formats so that each number appears in all four formats. **Copy the results below** (complete the table both here and in Excel). (6 points)

Percents	Decimals	Fractions	Scientific Notation
			3.25E-04
		279/481	
4.78%			
	0.713		

3. On Sheet 3, there is data on Pay Type and Gender. Create a Pivot Table of the data. **How many women are paid hourly?** (4 points)

4. On Sheet 4, is a list of salaries of a particular coal miner over a period of time in the 1940s and 1950s. Calculate the percent change in Column C for all the years after the first one. **Report below the percent from 1948 to 1949**. (4 points)

5. On **Sheet 5** is data on credit card debt. **Find the 30th percentile of credit card debt and report the value below.** (4 points)

6. A loan of $500 is take at a charge of 8% annual interest for 6 months. **Find the amount of interest paid and the total amount of money to be paid back at the end of 6 months**. (6 points)

7. Using an amortization table or a built-in financial formula in Excel, **find the payment owed monthly** on a mortgage of $450,000 for 30 years at 3.25% annual interest compounded monthly. (6 points)

8. Determine if the sequence of values 6.5, 7.8, 9.1, 10.4, 11.7, 13, … represents exponential growth. **If it does, state the common ratio. If it does not, explain why not**. (6 points)

9. Make a comparative bar graph (cluster column graph) of the pivot table you made on Sheet 3. Be sure your graph is appropriately labeled and has a descriptive title. **Summarize what the table means.** (5 points)

10. Using the data on Sheet 4, create a line graph of year and salary. Be sure that the graph is appropriately labeled. **Summarize in a sentence or two what the graph tells you**. (5 points)

11. On Sheet 6, create a summary table of the data on Neighborhoods, and then create a pie graph of the data. Be sure that the percents are displayed on the graph and it has an appropriate title. **Which neighborhood appears to have the most residents? What percent of the data is in this neighborhood?** (5 points)

Excel Work: (25 points)