Experiment G: Introduction to Graphical Representation of Data & the Use of Excel®

**REPORT SHEET NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Experimental Data Set 1:**

**Post-lab Questions to Experimental Set 1:**

1. Calculate the density of your unknown liquid. Report your average:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What is the density of your unknown? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How does this density value compare to your result from question #1 above?

3. Use your slope-intercept equation from Excel to determine:

A. the mass (in grams) of 27.0 mL of your liquid. \_\_\_\_\_\_\_\_\_\_

B. what volume (in mL) would 17.0 g of your liquid occupy. \_\_\_\_\_\_\_\_\_\_

**Experimental Data Set 2:**

**Post-lab Questions to Experimental Set 2:**

In this format which property is the independent variable? \_\_\_\_\_\_\_\_\_

How does this graph compare to your previously constructed Excel® graph from section A?

Is this data linear? \_\_\_\_\_\_\_\_

Briefly explain any similarities/differences in your two graphs

**Experimental Data Set 3:**

**Post-lab Questions to Experimental Set 3:**

A. Write this equation in terms of D and %.

B. Use the equation of the line to determine the density of a 4.80% glucose solution.

C. Use the equation of the line to calculate the % by mass of a glucose solution whose density is 1.0652 kg/L.