Linear Models from Experimental Data Worksheet

1. Answer the followings questions. Then, complete the table provided using the data you collected from the previous lesson.

   a. What is the independent variable in you experiment?

   b. What is the dependent variable in your experiment?

   c. How many data points do you have on your graph?

Wall Thickness (outer diameter)	Trial 1 Latex Strength	Trial 2 Latex Strength	Trial 3 Latex Strength	Average Latex Strength (air pressure–psi)
1/32 in				
1/16 in				
3/32 in				

2. Copy the data points from the table into the graph provided on the upper right of this worksheet.

   Label the x– and y–axes appropriately.

   Be sure to use the same units and increments from the Excel chart for both variables.

   For each data point, provide the numerical ordered pair.

3. Now that you have plotted the data points, draw a straight line from the data point at the far left to the data point at the far right. Write the coordinates for these data points below.

   (,   )   (,   )

4. Write the slope between the two points.

   Slope =

5. Using one of the coordinates from question 3 and the slope, write the equation of the line.

   Equation: