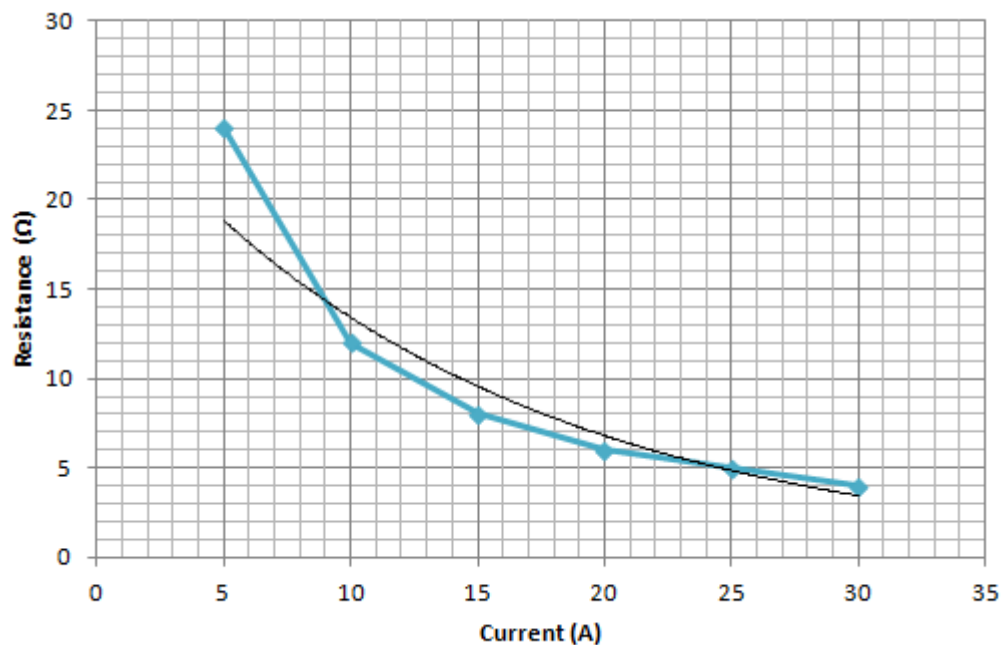
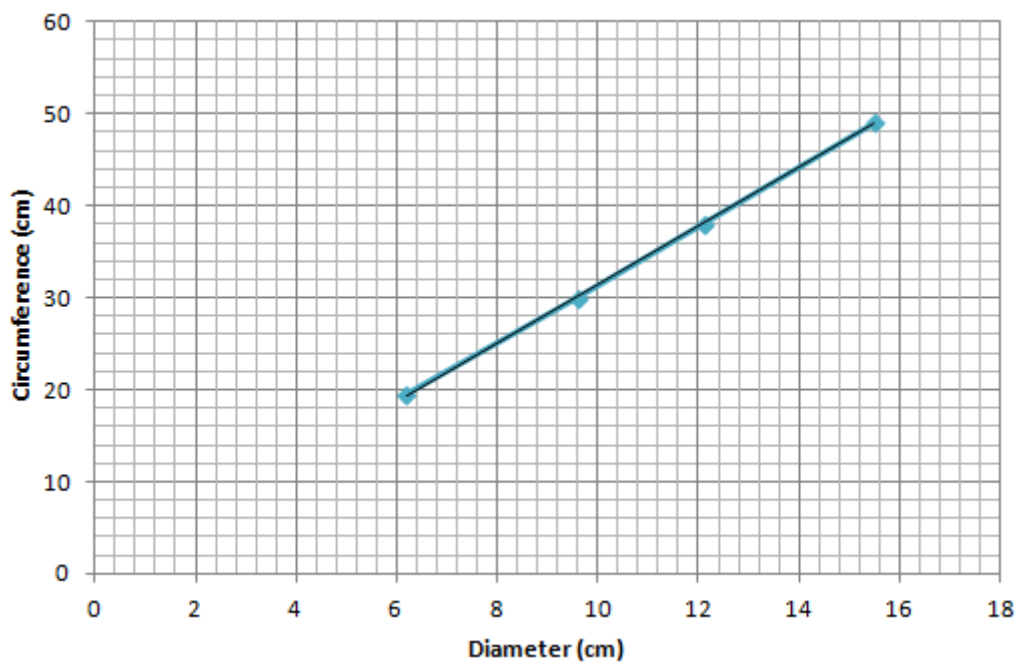
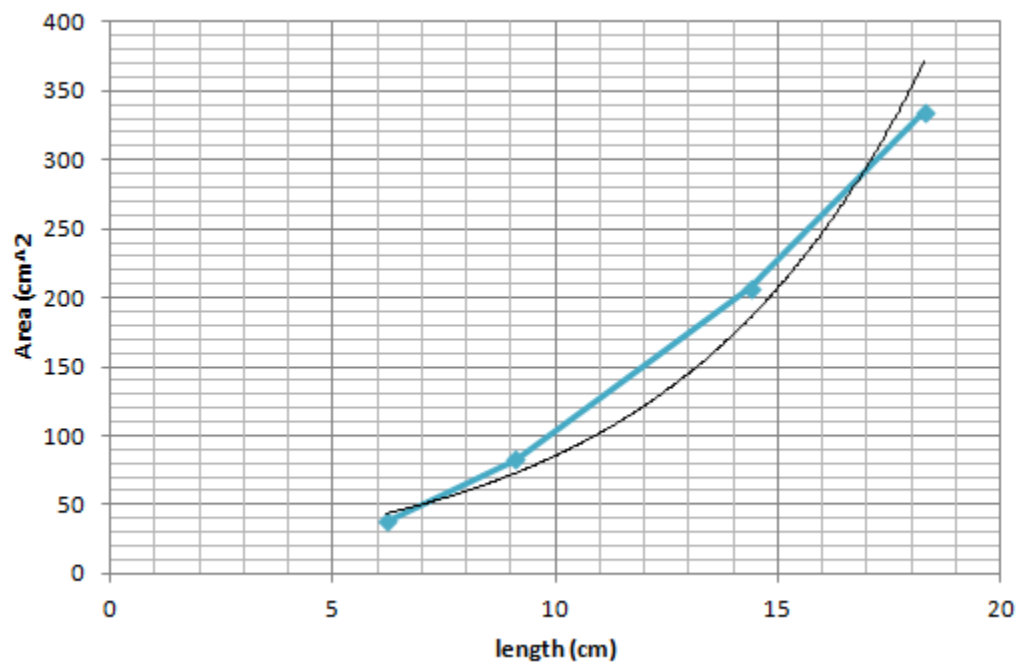


## Homework: Special Physics Program

Direction: Use a sheet of size 1 paper to answer the following problems completely.

1. An object is suspended from spring 1, and the spring's elongation (the distance it stretches) is  $X_1$ . Then the same object was removed from the first spring and suspended from a second spring. The elongation of spring 2 is  $X_2$ . The elongation of spring 2 is  $X_2$ .  $X_2$  is greater than  $X_1$ .
  - a. On the same axes, sketch the graphs of the mass versus elongation for both springs.
  - b. Is the origin included in the graph?
  - c. Which slope is steeper?
  - d. At a given mass,  $X_2 = 1.6X_1$ . If  $X_2 = 5.3$  cm, what is  $X_1$ ?
2. Identify the dependent and the independent variable in each of the graphs. Determine the relationship between the dependent and the independent variable as shown in the best fit line/curve.





Prepared By:  
Jay B. Gregorio  
Faculty, Science Subject Area