

Name: _____ Partner: _____ PH2223 - ____

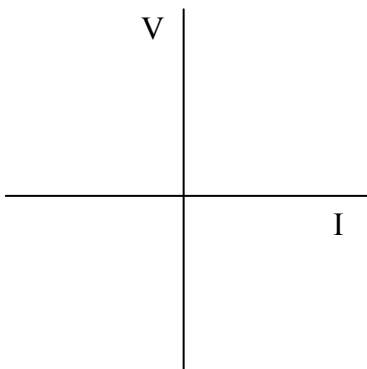
Experiment Sheet for Ohm's Law and Resistivity

You should have gotten a slope close to 2 when you were checking the resistance of the "2-Ohm" resistor. Specifically, what did you get?

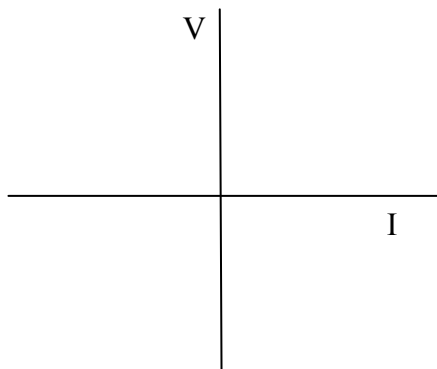
CHECKING FOR OHMIC DEVICES

Roughly sketch what your four different devices' graphs looked like in the space below.

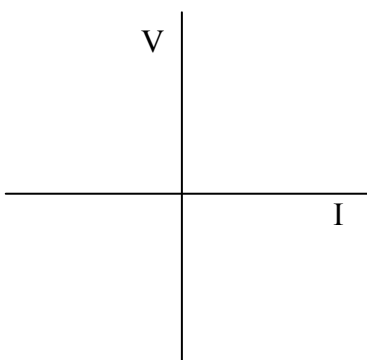
Device A



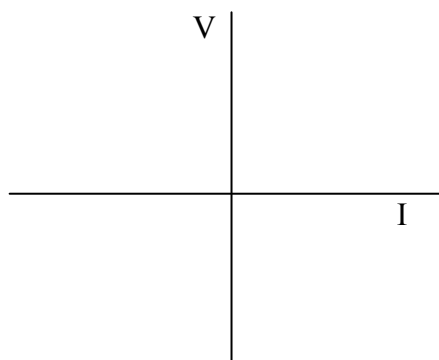
Device B



Device C



Device D



1. Which devices were "Ohmic"? _____

2. Which devices were not "Ohmic"? _____

DETERMINING THE RESISTIVITY OF WIRE

Experimentally find the resistances for the 5 spools of wire. Also calculate their cross-sectional areas and resistivities. Place all of your findings in the table below.

Spool	Material	Length (m)	Radius (m)	Area (m ²)	R (Ω)	ρ (Ω-m)

Sample Calculations (give a sample calculation for at least one complete row of data):

QUESTION:

Do the ratios of the resistances that you found make sense when you compare with the ratio of the radius's? Explain why or why not (hint: look at the equation).