

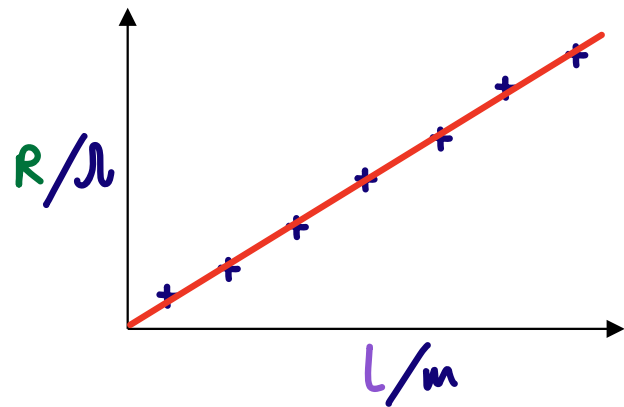


Resistivity - Results

$$R = \frac{\rho L}{A}$$

$$R = \frac{\rho}{A} \cdot L$$

$$y = mx + c$$



$$\rho = \text{gradient} \times A$$

Method 1: A length of wire was connected in series with an ammeter and in parallel with a voltmeter. Readings were taken as the length of the wire was increased.

To calculate the resistance, and therefore the resistivity of the material the wire was made from, the following data was recorded:

Diameter of the wire recorded in three places:

0.33 mm
0.33 mm
0.31 mm

Length / m	Potential difference / V	Current / A	Resistance / Ω
0.100	2.92	3.48	
0.200	2.91	2.03	
0.300	2.87	1.35	
0.400	2.75	1.05	
0.500	2.69	0.80	
0.600	2.67	0.64	
0.700	2.62	0.57	