**Noteguide for Resistivity - Videos 18C1 Name**

 

Ex #1: A steel wire is 2.7 m long, and has a resistance of 7.3 ohms. What is its diameter?

Whiteboards:

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| 1. A copper wire is 1610 m long (1 mile) and has a cross sectional area of 4.5 x 10-6 m2. What is its resistance? (This wire is about 2.4 mm in dia)(6.0 Ω) | 2. An Aluminium wire is 3.2 mm in diameter, and has a resistance of 142 ohms. What length is it?(43,000 m) |
| 3. A piece of wire has a diameter of 0.42 mm, and a length of 53 cm. What is its resistivity if it has a resistance of 4.9 ohms? (what kind of wire is it?) (130x10-8 Ωm) |