

## Answer on Question #41502 – Physics – Other

### Question.

The resistivity,  $R$ , of a wire is given by:

- 1)  $\rho LA$
- 2)  $AL\rho$
- 3)  $A\rho L$
- 4)  $\rho lA$

### Solution.

The electrical resistance  $R$  of the material is:

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

$\rho$  is the electrical resistivity;

$L$  is the length of the piece of material;

$A$  is the cross-sectional area of the specimen.

So, the electrical resistivity of the material is:

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

### Answer.

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