

35 A wire of cross-sectional area  $5.0 \times 10^{-6} \text{ m}^2$  is made of a metal of resistivity  $50 \times 10^{-8} \Omega \text{ m}$ .

The potential difference across the wire is 6.0 V and the current is 3.0 A.

What is the length of the wire?

**A** 0.050 m

**B** 0.20 m

**C** 5.0 m

**D** 20 m