**35** Two copper wires S and T, of equal length, are connected in parallel. Wire S has a diameter of 3.0 mm. Wire T has a diameter of 1.5 mm.

A potential difference is applied across the ends of this parallel arrangement.

What is the value of the ratio $\dfrac{\text{current in S}}{\text{current in T}}$ ?

**A** $\dfrac{1}{4}$ **B** $\dfrac{1}{2}$ **C** 2 **D** 4