

- 32** A cylindrical piece of a soft, electrically-conducting material has resistance  $R$ . It is rolled out so that its length is doubled but its volume stays constant.

What is its new resistance?

**A**  $\frac{R}{2}$

**B**  $R$

**C**  $2R$

**D**  $4R$

- 33** The sum of the electrical currents into a point in a circuit is equal to the sum of the currents out of