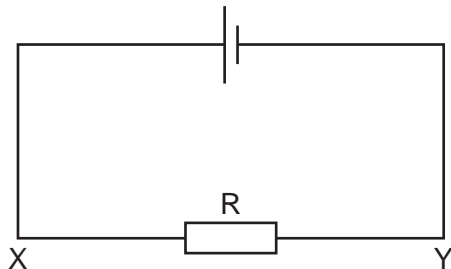**31** The current in the circuit is 4.8 A.

What is the rate of flow and the direction of flow of electrons through the resistor R?

A $3.0 \times 10^{19} \, \text{s}^{-1}$ in direction X to Y

B $6.0 \times 10^{18} \, \text{s}^{-1}$ in direction X to Y

C $3.0 \times 10^{19} \, \text{s}^{-1}$ in direction Y to X

D $6.0 \times 10^{18} \, \text{s}^{-1}$ in direction Y to X