

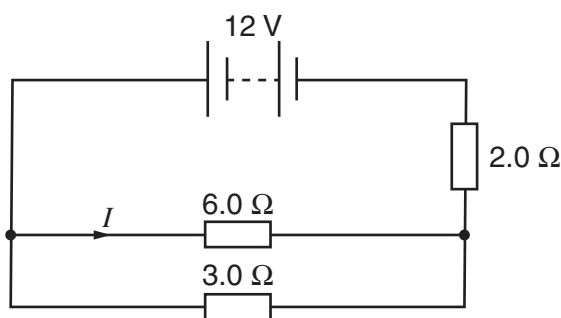
- 28 Microwaves of wavelength 3.00 cm are incident normally on a row of parallel metal rods. The separation of the rods is 8.00 cm. The first order diffraction maximum is observed at an angle of 22.0° to the direction of the incident waves.

What is the angle between the first and second order diffraction maxima?

- A** 22.0° **B** 26.6° **C** 44.0° **D** 48.6°
- 29 Which electrical quantity would be the result of a calculation in which energy is divided by charge?
- A** current
B potential difference
C power
D resistance
- 30 A wire carries a current of 2.0 amperes for 1.0 hour.

How many electrons pass a point in the wire in this time?

- A** 1.2×10^{-15}
B 7.2×10^3
C 1.3×10^{19}
D 4.5×10^{22}
- 31 The diagram shows a circuit in which the battery has negligible internal resistance.



What is the value of the current I ?

- A** 1.0 A **B** 1.6 A **C** 2.0 A **D** 3.0 A