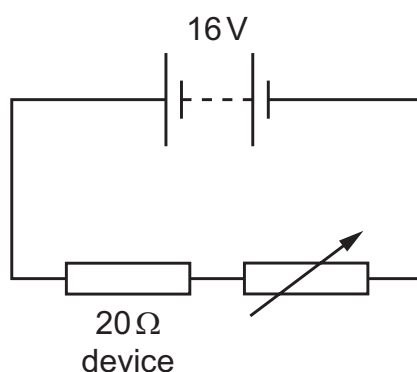


- 34** A cell of electromotive force (e.m.f.) E delivers a charge Q to an external circuit.

Which statement is correct?

- A** The energy dissipated in the external circuit is EQ .
- B** The energy dissipated within the cell is EQ .
- C** The external resistance is EQ .
- D** The total energy dissipated in the cell and the external circuit is EQ .

- 37** An electrical device of fixed resistance $20\ \Omega$ is connected in series with a variable resistor and a battery of e.m.f. 16 V and negligible internal resistance.



The power dissipated in the electrical device is 4.0 W .

What is the resistance of the variable resistor?

- A** $16\ \Omega$
- B** $36\ \Omega$
- C** $44\ \Omega$
- D** $64\ \Omega$

- 34** Which circuit symbol does **not** represent an electric component that is designed to emit sound waves?

