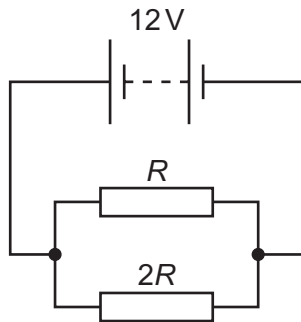


- 31** Two resistors of resistances R and $2R$ are connected in parallel with a battery of electromotive force (e.m.f.) 12 V and negligible internal resistance.



The total power dissipated by the two resistors is 36 W .

What is the value of R ?

- A** $0.50\ \Omega$ **B** $2.7\ \Omega$ **C** $4.0\ \Omega$ **D** $6.0\ \Omega$

- 32** A circuit consists of a $2.0\ \Omega$ resistor in series with a parallel combination of a $4.0\ \Omega$ and a $12\ \Omega$ resistor.