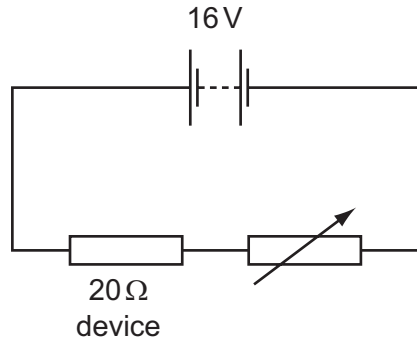


- 34** An electrical device of fixed resistance  $20\ \Omega$  is connected in series with a variable resistor and a battery of electromotive force (e.m.f.)  $16\ \text{V}$  and negligible internal resistance.



What is the resistance of the variable resistor when the power dissipated in the electrical device is  $4.0\ \text{W}$ ?

- A**  $16\ \Omega$       **B**  $36\ \Omega$       **C**  $44\ \Omega$       **D**  $60\ \Omega$

**Space for working**