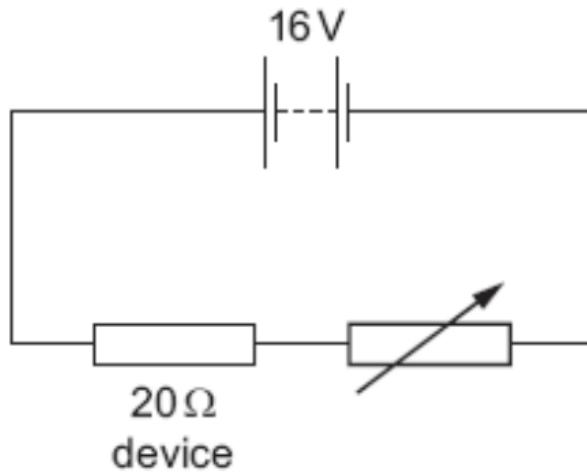


- 23 An electrical device of fixed resistance  $20\ \Omega$  is connected in series with a variable resistor and a battery of electromotive force (e.m.f.) 16 V and negligible internal resistance.



What is the resistance of the variable resistor when the power dissipated in the electrical device is 4.0 W?

A  $16\ \Omega$

B  $36\ \Omega$

C  $44\ \Omega$

D  $60\ \Omega$