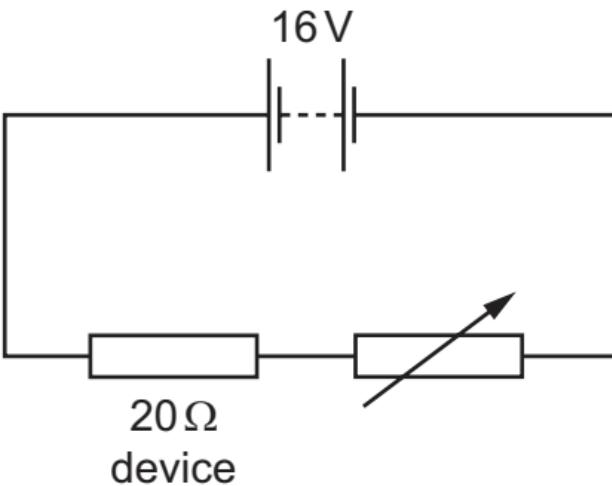


- 34 An electrical device of fixed resistance 20Ω is connected in series with a variable resistor and a battery of electromotive force (e.m.f.) 16 V and negligible internal resistance.



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

A 16Ω

B 36Ω

C 44Ω

D 60Ω

- 35 A wire of length l has resistance R . The cross section of the wire is circular with radius r .