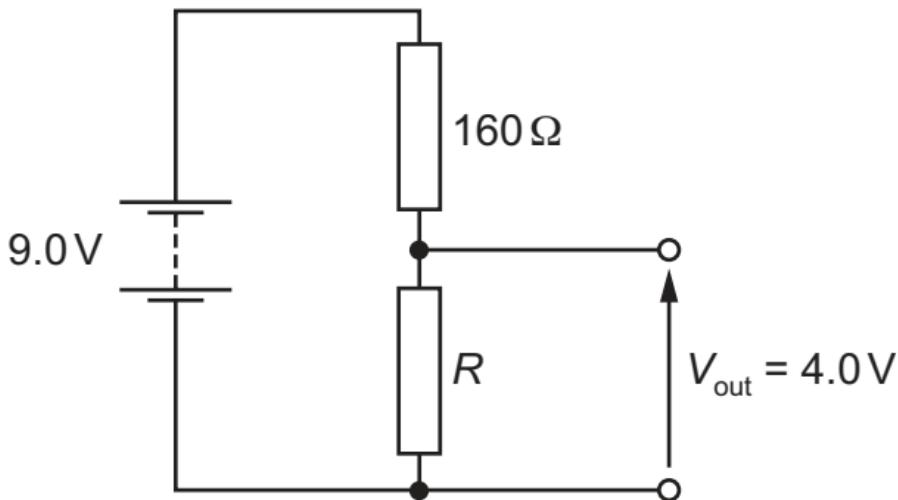


- 37 The circuit diagram shows a battery of electromotive force (e.m.f.) 9.0V and negligible internal resistance. It is connected to two resistors of resistances 160Ω and R . The output potential difference V_{out} is 4.0V.



What is the resistance R ?

A 32Ω

B 49Ω

C 71Ω

D 128Ω

- 38 In the circuit shown, XY is a length L of uniform resistance wire. A potential difference is applied