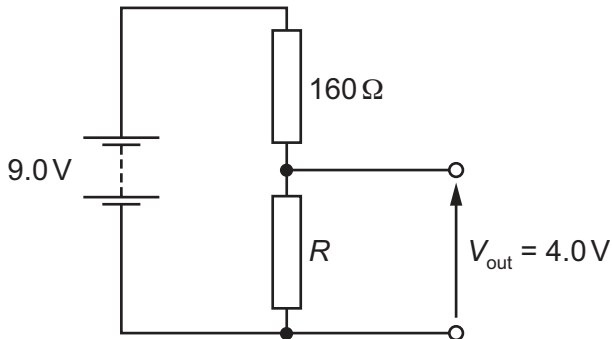37 The circuit diagram shows a battery of electromotive force (e.m.f.) 9.0 V and negligible internal resistance. It is connected to two resistors of resistances 160 Ω and R. The output potential difference V_{out} is 4.0 V.

What is the resistance R?

A   32 Ω   **B**   49 Ω   **C**   71 Ω   **D**   128 Ω