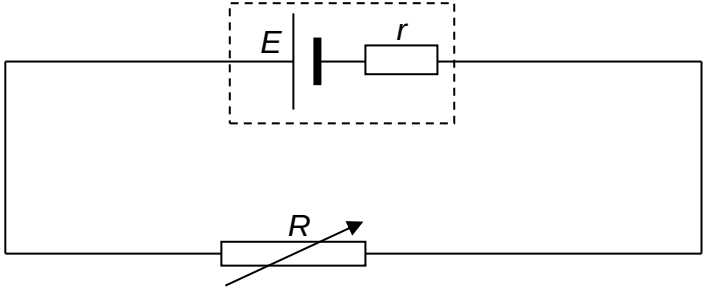
19 A battery of e.m.f E and internal resistance r is connected to a variable resistor R as shown below. When R = 16 Ω, the current in the circuit is 0.50 A. It is found that the battery supplies 4500 J of energy for a duration of 1.0×10^3 s.



What is the internal resistance r ?

A 1.0 Ω **B** 2.0 Ω **C** 4.5 Ω **D** 9.0 Ω