

35 A wire supplying a shower heater with a current of 35 A has a resistance of $25\text{ m}\Omega$.

What is the power dissipated in the wire?

A 31 W

B 49 W

C 31 kW

D 49 kW

36 A circuit has a number of identical cells connected in series. The cells have an electromotive force of 1.5 V and an internal resistance of $0.5\text{ }\Omega$. The circuit is connected to a load resistor of $10\text{ }\Omega$. The current in the circuit is 0.5 A . How many cells are there in the circuit?