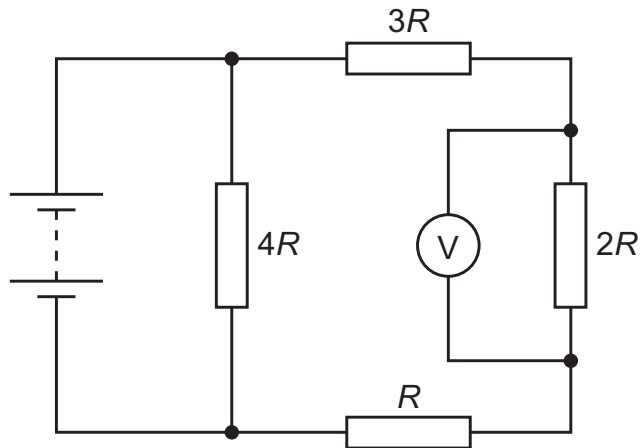


36 Four resistors of resistance R , $2R$, $3R$ and $4R$ are connected to form a network.

A battery of negligible internal resistance and a voltmeter are connected to the resistor network as shown.



The voltmeter reading is $2V$.

What is the electromotive force (e.m.f.) of the battery?

A $2V$

B $4V$

C $6V$

D $10V$