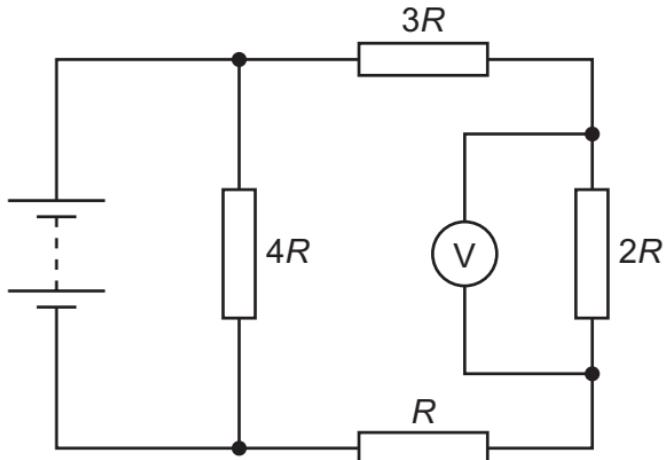


**36** Four resistors of resistance  $R$ ,  $2R$ ,  $3R$  and  $4R$  are connected to form a network.

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



The voltmeter reading is 2 V.

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

**A** 2 V

**B** 4 V

**C** 6 V

**D** 10 V