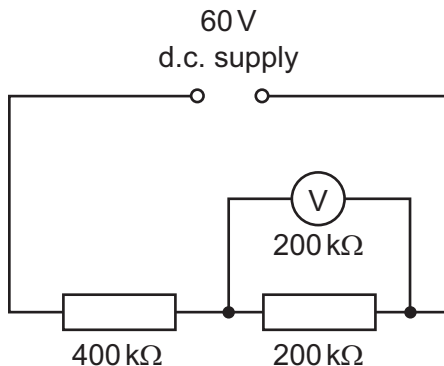


**38** A constant 60 V d.c. supply is connected across two resistors of resistance  $400\text{ k}\Omega$  and  $200\text{ k}\Omega$ .



What is the reading on a voltmeter, also of resistance  $200\text{ k}\Omega$ , when connected across the  $200\text{ k}\Omega$  resistor as shown in the diagram?

**A** 12 V

**B** 15 V

**C** 20 V

**D** 30 V

**39** Which statement concerning  $\alpha$  particles is correct?