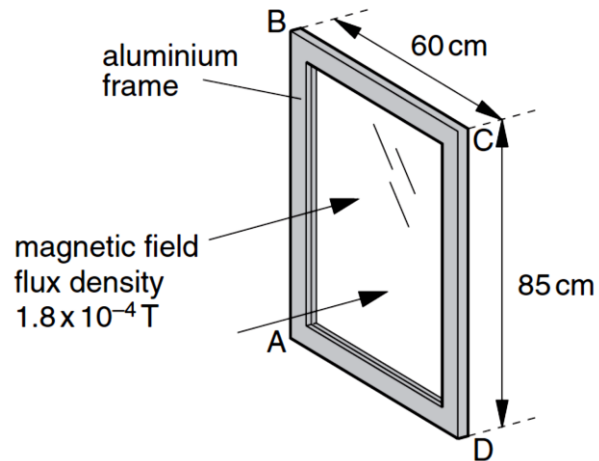24 The aluminium frame ABCD of a window measures 85 cm × 60 cm, as shown below.
The window is hinged along the edge AB.
The Earth's magnetic field, of flux density $1.8 \times 10^{-4}$ T, is normal to the window when it is closed.
When open, the plane of the window is parallel to the Earth's magnetic field.



If the closed window is now opened in a time of 0.20 s, what is the average e.m.f. induced in side CD?

A $\quad 1.4 \times 10^{-4}$ V

B $\quad 4.6 \times 10^{-4}$ V

C $\quad 1.4$ V

D $\quad 4.6$ V