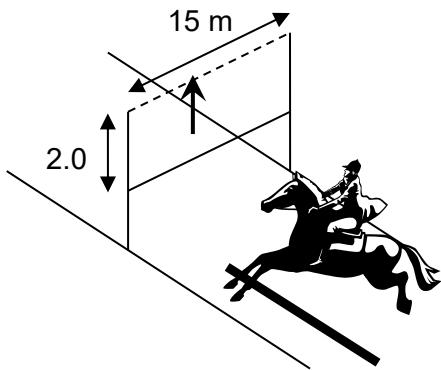


- 26** At the beginning of a horse race, a horizontal straight wire of length 15 m is raised vertically through a height of 2.0 m at a constant speed of  $5.0 \text{ m s}^{-1}$ .



If the average e.m.f. induced across the ends of the wire is 1.5 mV, what is the horizontal component of the Earth's magnetic field strength that is perpendicular to the wire?

- A**  $1.0 \times 10^{-5} \text{ T}$       **B**  $2.0 \times 10^{-5} \text{ T}$       **C**  $1.5 \times 10^{-4} \text{ T}$       **D**  $3.0 \times 10^{-4} \text{ T}$