

**25** An aircraft has a wing span from one wing tip to the other of 80 m. It flies horizontally at a speed of  $150 \text{ ms}^{-1}$  through a region where the vertical component of the Earth's magnetic field is  $1.0 \times 10^{-5} \text{ T}$ .

What is the magnitude of the magnetic flux cut by the aircraft as it flies for a time of one minute?

**A**  $0.048 \text{ Wb}$

**B**  $0.090 \text{ Wb}$

**C**  $0.12 \text{ Wb}$

**D**  $7.2 \text{ Wb}$

