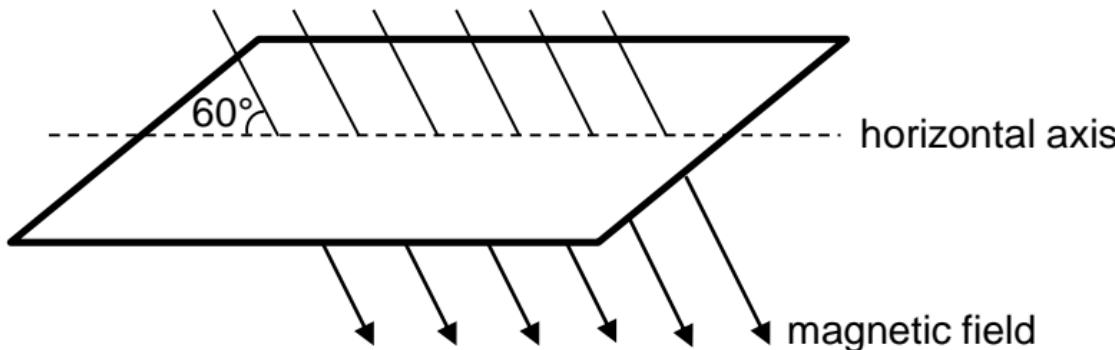


- 25 A magnetic field of flux density  $4.0 \times 10^{-4}$  T passes through a coil of wire of 50 turns and an area of  $30 \text{ cm}^2$ . The field makes an angle of  $60^\circ$  with the horizontal plane of the coil.



What is the e.m.f. induced in the coil when it is turned over once about its horizontal axis in a time of 0.60 s?

- A  $5.0 \times 10^{-5}$  V      B  $8.7 \times 10^{-5}$  V      C  $1.0 \times 10^{-4}$  V      D  $1.7 \times 10^{-4}$  V