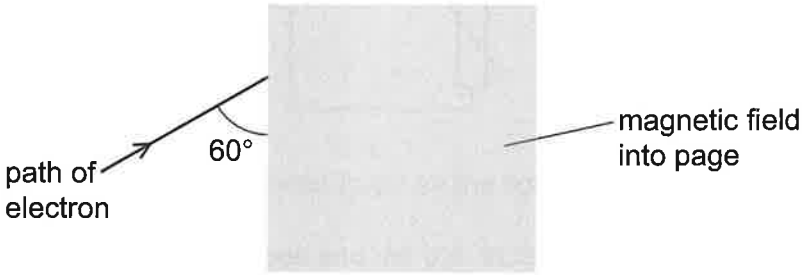
26 An electron travelling at $1.5 \times 10^{7}\ \text{m s}^{-1}$ enters a uniform magnetic field of flux density $3.0 \times 10^{-5}\ \text{T}$ at 60° to the edge of the region of the field, as shown.



The magnetic field is directed into the page, perpendicular to the plane of the paper.

What is the magnitude of the force on the electron?

A $3.6 \times 10^{-17}\ \text{N}$ **B** $4.2 \times 10^{-17}\ \text{N}$ **C** $6.2 \times 10^{-17}\ \text{N}$ **D** $7.2 \times 10^{-17}\ \text{N}$