23 An electron moves in a vacuum at an angle of 20° to a magnetic field of magnetic flux density 0.088 T.
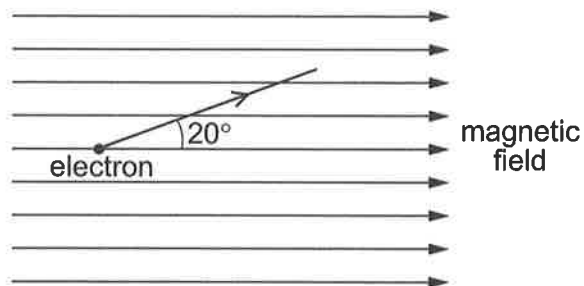

The force on the electron is 4.3×10^{-14} N.

What is the speed of the electron?

A $6.9 \times 10^4\,\text{m s}^{-1}$

B $1.0 \times 10^6\,\text{m s}^{-1}$

C $3.2 \times 10^6\,\text{m s}^{-1}$

D $8.9 \times 10^6\,\text{m s}^{-1}$