

5 An electron has a de Broglie wavelength of 1.55×10^{-9} m.

Which of the following gives the speed, in ms^{-1} , of this electron?

☐ A $\frac{9.11 \times 10^{-31}}{6.63 \times 10^{-34} \times 1.55 \times 10^{-9}}$

☐ B $\frac{1.55 \times 10^{-9} \times 9.11 \times 10^{-31}}{6.63 \times 10^{-34}}$

☐ C $\frac{6.63 \times 10^{-34} \times 1.55 \times 10^{-9}}{9.11 \times 10^{-31}}$

☐ D $\frac{6.63 \times 10^{-34}}{1.55 \times 10^{-9} \times 9.11 \times 10^{-31}}$

(Total for Question 5 = 1 mark)