

9 A proton and an electron have equal kinetic energies. The speed of the proton is  $v$ .

The mass of a proton is 2000 times greater than the mass of an electron.

Which of the following expressions gives the speed of the electron?

☐ A  $\sqrt{2000} \times v$

☐ B  $\frac{v}{\sqrt{2000}}$

☐ C  $\frac{v}{2000}$

☐ D  $2000 \times v$

(Total for Question 9 = 1 mark)