

Ch 19 HW Quiz #1B

An electron moving in the +x direction has an initial kinetic energy of 4.96×10^{-18} Joules when it passes through the origin. It encounters a region with a uniform electric field that brings the electron to a stop after it has moved 3.30 cm in the +x direction. Assume the electric force is the only relevant force in this problem. See the formula sheet if you need to look up the properties of an electron.

- a) If the voltage at the origin is assumed to be 0.00 Volts, what is the potential at the location where the electron stops?
- b) What is the magnitude and direction of the uniform electric field in which the electron is immersed?