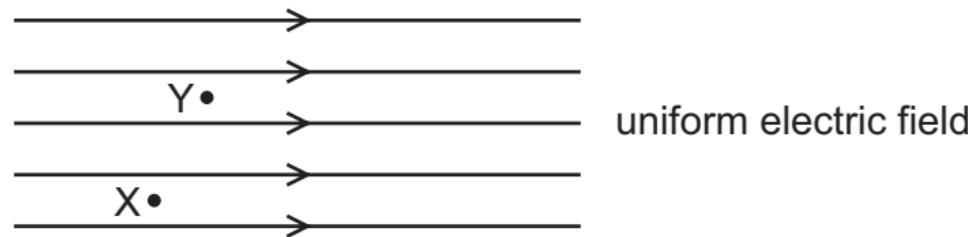


32 An electron moves between two points X and Y in a uniform electric field, as shown.



The distance between X and Y is 4.0 cm and the line XY is at an angle of 60° to the direction of the field.

The field exerts the only force on the electron.

The field strength is 100 N C^{-1} .

What is the change in the kinetic energy of the electron as it moves from X to Y?

A -4 eV

B -2 eV

C $+2 \text{ eV}$

D $+4 \text{ eV}$