

## HW 1-2

Consider a uniform electric field  $E$  of strength  $20,000 \text{ N/C}$ . An electron is now injected perpendicularly into this field with a speed of  $2 \times 10^6 \text{ m/s}$ .

- A) Describe in words the path the electron will follow.
- B) How far from its original line of travel will the electron be diverted after travelling  $3 \text{ cm}$ ?
- C) Suppose instead that the electron had been injected parallel to the electric field. What shape path would it then follow?

