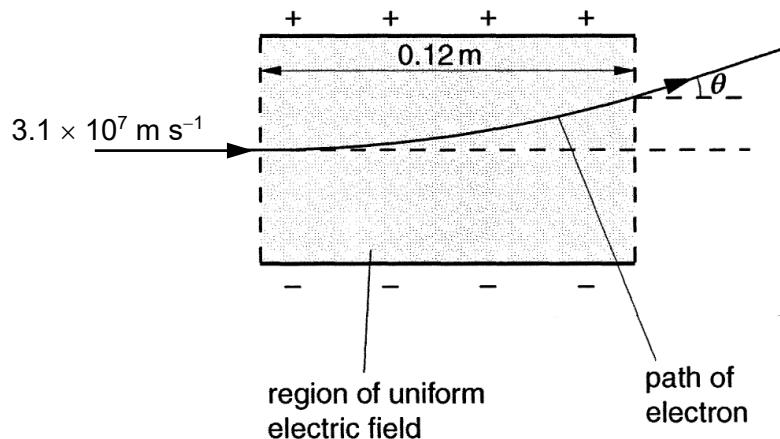


- 18** The diagram below shows a beam of electrons travelling at a speed of $3.1 \times 10^7 \text{ m s}^{-1}$ in a uniform electric field created by two charged parallel plates.



When an electron is in this field, it experiences a constant force of $3.2 \times 10^{-15} \text{ N}$ towards the positive plate.

The length of each parallel plate is 0.12 m. The electron emerges from the electric field region at an angle θ .

What is the angle θ ?

- A** 0°
- B** 24°
- C** 66°
- D** 90°