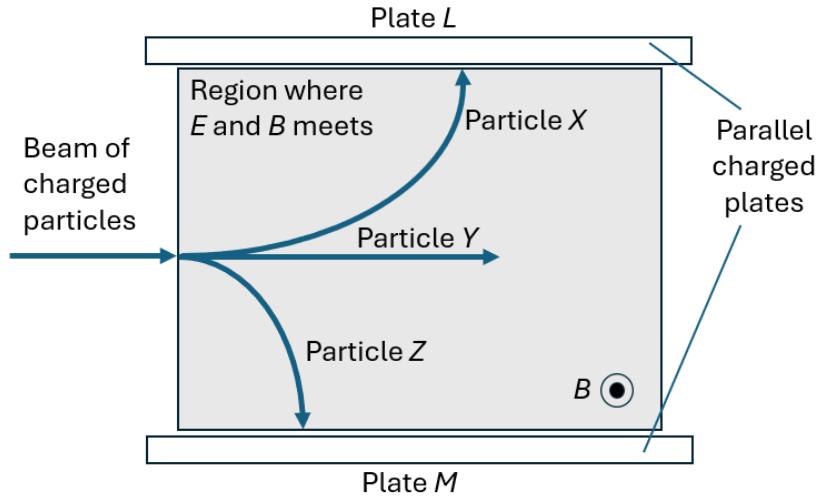


- 25 A beam of charged particles enters a region where a uniform electric field  $E$  setup by Plate  $L$  and Plate  $M$  is perpendicular to a uniform magnetic field  $B$ . Magnetic field  $B$  is directed out of the paper. The particles enter this region horizontally from the left.

The path of particle X, Y and Z are illustrated in the diagram below.



Which of the statement can be concluded from the observation?

- A The velocity of particle Y is larger than  $\frac{E}{B}$ .
- B Plate  $L$  has a lower potential than plate  $M$ .
- C Particle X, Y and Z have the same polarity.
- D Particle Z has a larger mass than particle X and Y.