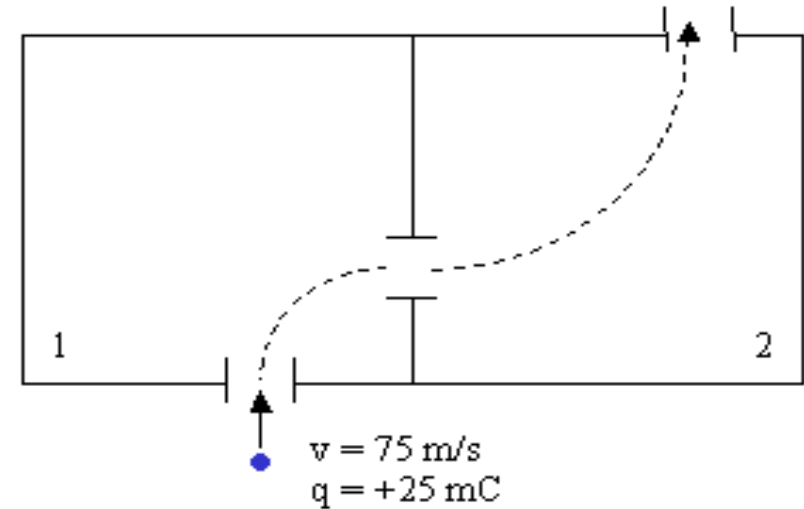


Checkpoint 8

The drawing below shows the top view of two interconnected chambers. Each chamber has a unique magnetic field. A positively charged particle is fired into chamber 1, and observed to follow the dashed path shown in the figure.



Compare the magnitude of the magnetic field in chamber 1 to the magnitude of the magnetic field in chamber 2

A. $|B_1| > |B_2|$

B. $|B_1| = |B_2|$

C. $|B_1| < |B_2|$

Observation: $R_2 > R_1$

$$R = \frac{mv}{qB} \longrightarrow |B_1| > |B_2|$$

Motion in a Magnetic Field: Question 3 (N = 812)

