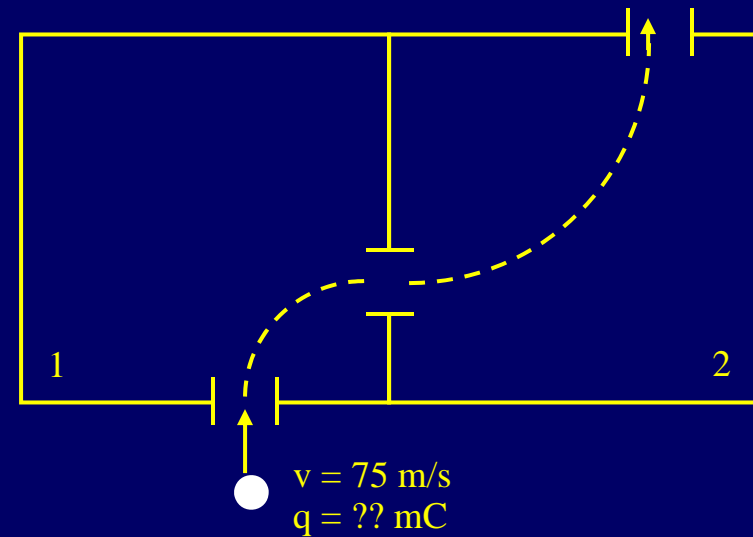




ACT: 2 chambers

Each chamber has a unique magnetic field. A positively charged particle enters chamber 1 with velocity $v_1 = 75$ m/s up, and follows the dashed trajectory.



A second particle with mass $2m$ enters the chamber and follows the same path as the particle with mass m and charge $q = 25$ mC. What is its charge?

- 1) $Q = 12.5$ mC
- 2) $Q = 25$ mC
- 3) $Q = 50$ mC