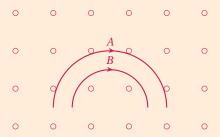
magnetic force

Two particles A and B of masses m_A and m_B respectively and having the same charge are moving in a plane. A uniform magnetic field exists perpendicular to this plane. The speeds of the particles are v_A and v_B respectively and the trajectories are as shown in the figure. **IIT-JEE 2001**



(a)
$$m_A v_A < m_B v_B$$

(b)
$$m_A v_A > m_B v_B$$

(c)
$$m_A < m_B$$
 and $v_A < v_B$ (d) $m_A = m_B$ and $v_A = v_B$

(d)
$$m_A = m_B$$
 and $v_A = v_B$