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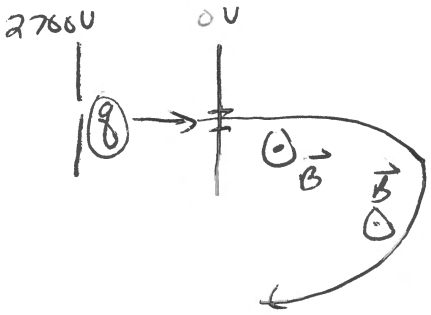

1st: find speed after being accelerated.

$K_i = K_f$

$q V_i = q V_f + \frac{1}{2} m v_f^2$

$\frac{1}{2} m v_f^2 = q(V_i - V_f)$

$v_f = \sqrt{\frac{2q(V_i - V_f)}{m}} = \sqrt{\frac{2(3.2 \times 10^{-19}\,C)(2700)}{6.6 \times 10^{-27}}}$

$v_f \approx 5.12 \times 10^5$ m/s.

Next: pass through region where $B = 0.3$ T

$F = ma$

$qvB = \frac{mv^2}{R}$

$R = \frac{mv}{qB} = \frac{(6.6 \times 10^{-27}\,kg)(5.12 \times 10^5\,m/s)}{(3.2 \times 10^{-19}\,C)(0.3\,T)} = \boxed{0.035\,m}$