

15. From Eq. 29-16, we find

$$B = \frac{m_e v}{er} = \frac{(9.11 \times 10^{-31} \text{ kg})(1.3 \times 10^6 \text{ m/s})}{(1.60 \times 10^{-19} \text{ C})(0.35 \text{ m})} = 2.1 \times 10^{-5} \text{ T} .$$