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$$F = ma$$

$$qNrB = \frac{mNr^2}{R}$$

$$B = \frac{mNr}{qR}$$

$$\text{Inside a solenoid } B = \mu_0 NI$$

$$\mu_0 NI = \frac{mNr}{qR}$$

$$I = \frac{mNr}{qRM_0m} = \frac{(9.11 \times 10^{-31})(10^4)}{(1.6 \times 10^{-19})(0.02)(4\pi \times 10^{-7})(2500)}$$

$$I = 9.06 \times 10^{-4} \text{ A}$$