9. Дано: $R = 0.5\,м$, $\Delta U = 1500\,В$, $q = 1.6 \times 10^{-19}\,Кл$, $m = 1.67 \times 10^{-27}\,кг$

$B - ?$

Сила Лоренца: $F = q \cdot v \cdot B$

и $\frac{mv^2}{R} = qvB \Rightarrow B = \frac{mv}{qR}$

$qU = \frac{1}{2}mv^2$

$v = \sqrt{\frac{2qU}{m}}$

$\Rightarrow B = \frac{m}{qR}\sqrt{\frac{2qU}{m}} = \sqrt{\frac{2mU}{qR^2}} \approx 0.007\,А/м$