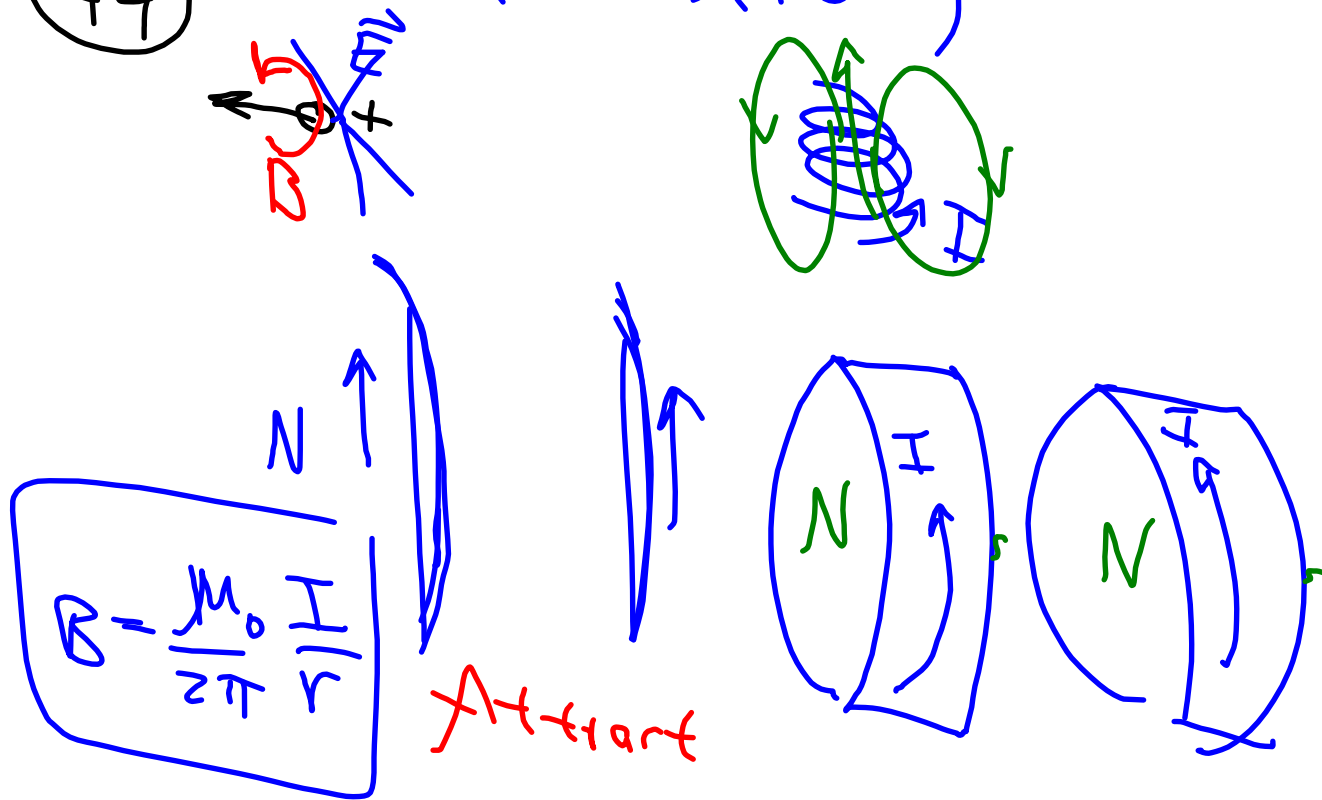
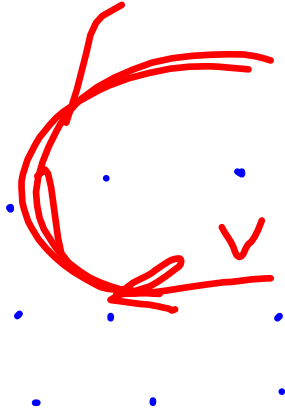


(43) $1.6 \times 10^{-3} \frac{N}{C} \left(\frac{1 \text{ proton}}{1.6 \times 10^{-19} C} \right)$

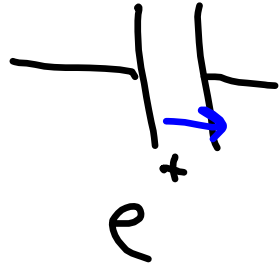
(44) $10^{-3} (10^{19}) \frac{\text{protons}}{\text{sec}} \left(\frac{1 \text{ meter}}{10^9 \text{ protons}} \right)$



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$$C = \epsilon_0 \frac{A}{d}$$

$$U = \frac{1}{2} CV^2$$

$$Q = VC$$

$$C = \epsilon_0 \frac{A}{d}$$

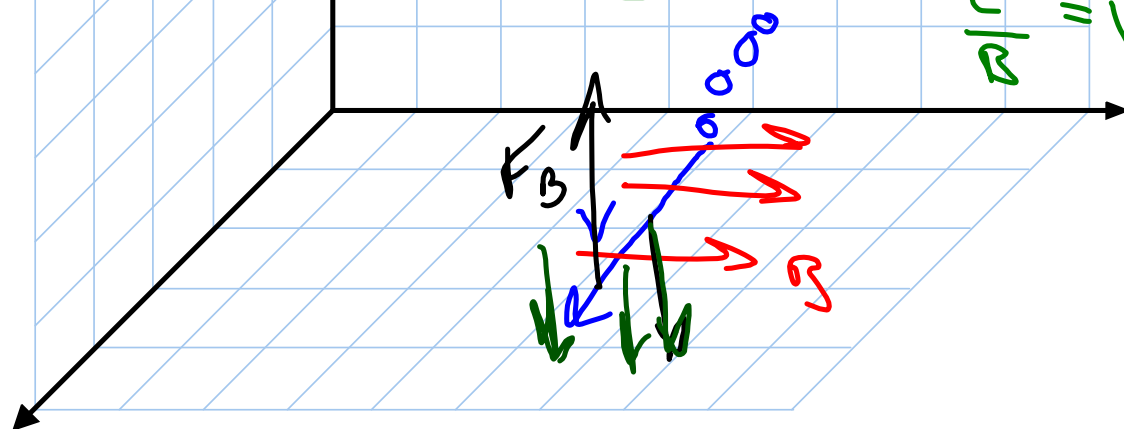
53

53

$$E = \frac{F}{q} \Rightarrow \vec{F}_{elk} = q \vec{E}$$

$$\vec{F}_B = q \vec{v} \times \vec{B}$$

$$\frac{R}{m} q E = q v B$$

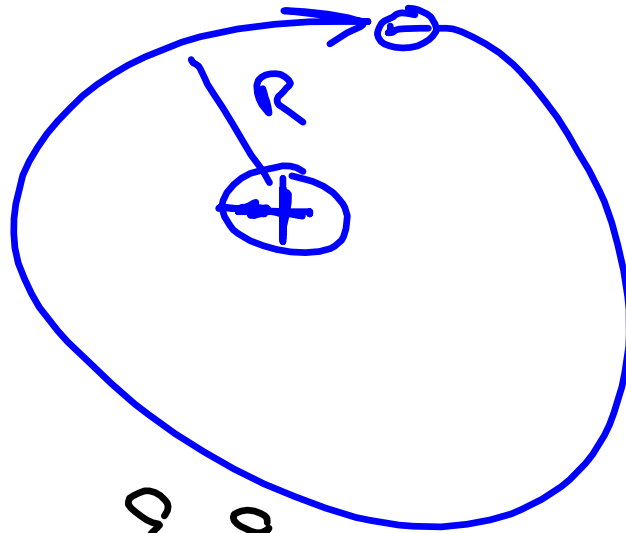


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$$\Sigma = \frac{d}{dt} (B \cdot A)$$

$$\Sigma = IR$$

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$$K = \frac{1}{2} m v^2$$

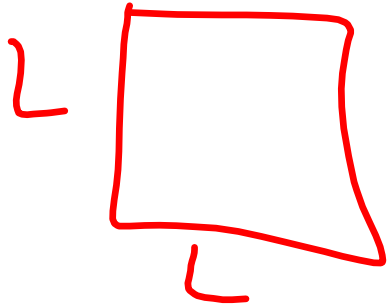
$$F = \frac{1}{4\pi\epsilon_0} \frac{q_1 q_2}{R^2}$$

$$W = \Delta KE = F \cdot R$$



$$IR = \frac{d}{dt} (B \cdot A)$$

Area



$$= A \frac{d}{dt} (B)$$

$$= A \frac{d}{dt} (a - bt)$$

$$IR = L^2 \frac{d}{dt} (1 - b)$$

