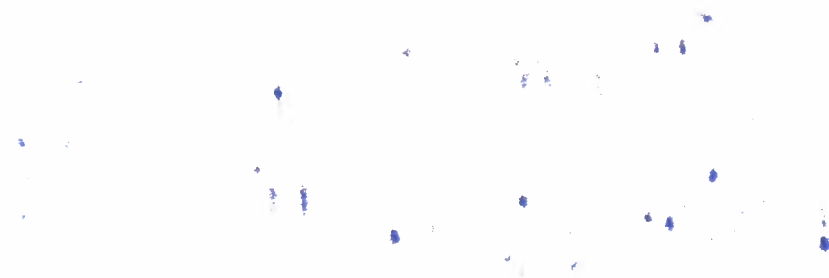
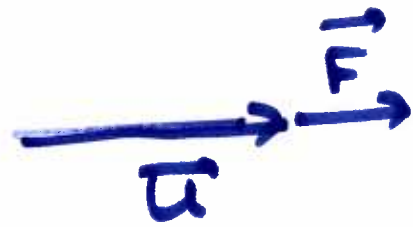
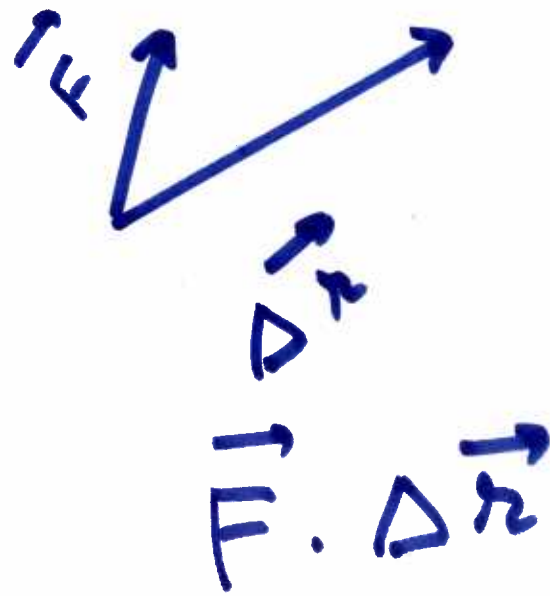


$$\vec{F} = \frac{d\vec{p}}{dt} \\ = m\vec{a}$$

$$\vec{F} = \frac{d}{dt} \left[\frac{m_0 \vec{u}}{\sqrt{1 - u^2/c^2}} \right]$$



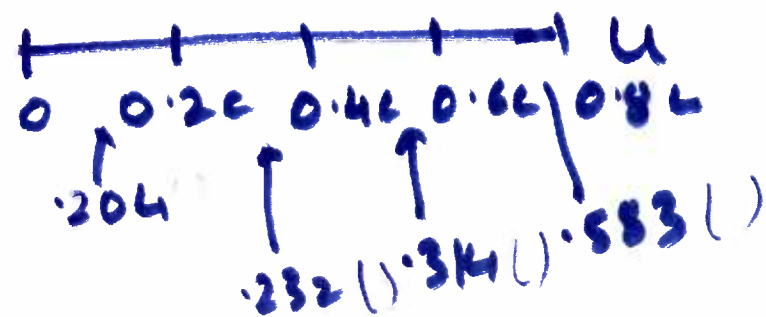


$$q(\vec{u} \times \vec{B})$$



$$\frac{m_0 du}{\left(1 - \frac{u^2}{c^2}\right)^{3/2}}$$

$$\begin{aligned} \text{Den}^r &= \left(1 - \frac{c^2 \sin^2 \theta}{c^2}\right)^{3/2} \\ &= (1 - \sin^2 \theta)^{3/2} \\ &= (\cos^2 \theta)^{3/2} \end{aligned}$$



$$v_t = v_0 + at$$

$$\frac{v_t - v_0}{a} = t$$