$m \rightarrow m_1 + m_2 + E$

$(m - m_1 - m_2)c^2 = E$

10g $T_{1/2}$

$N(t) = N_0 e^{-\lambda t}$

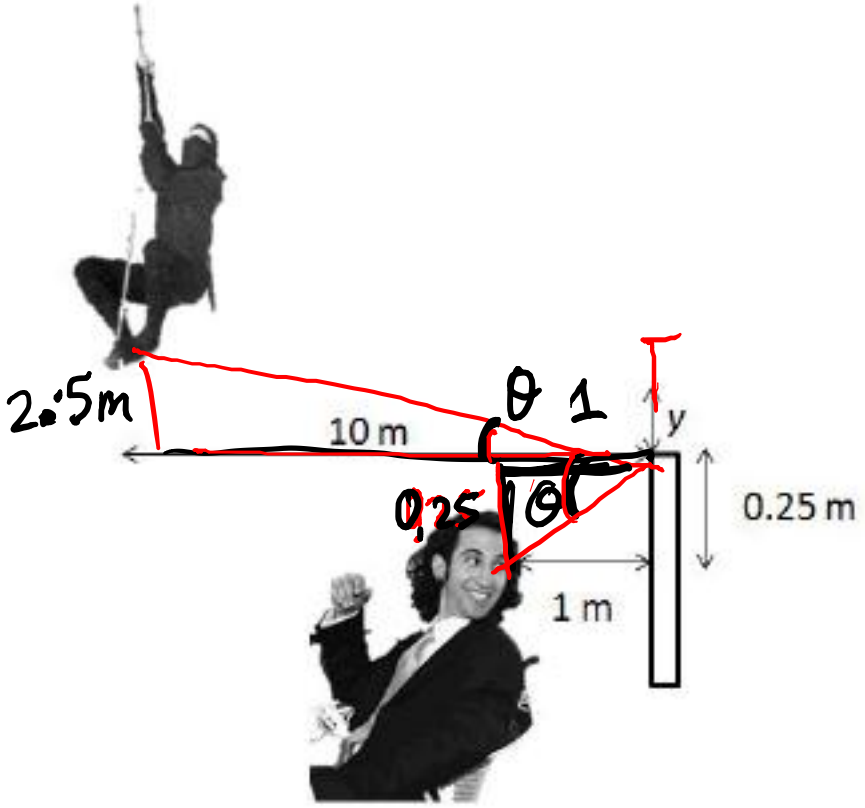
$\lambda \longleftrightarrow T_{1/2}$ $\quad T_{1/2} \approx \frac{0.7}{\lambda}$

$M(t) = M_0 e^{-\lambda t}$

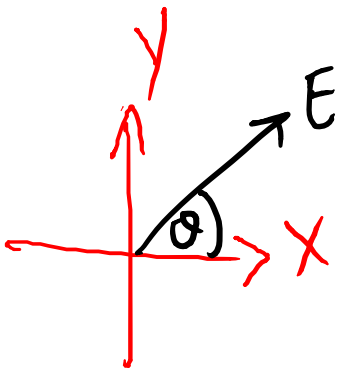
10g $\rightarrow$?

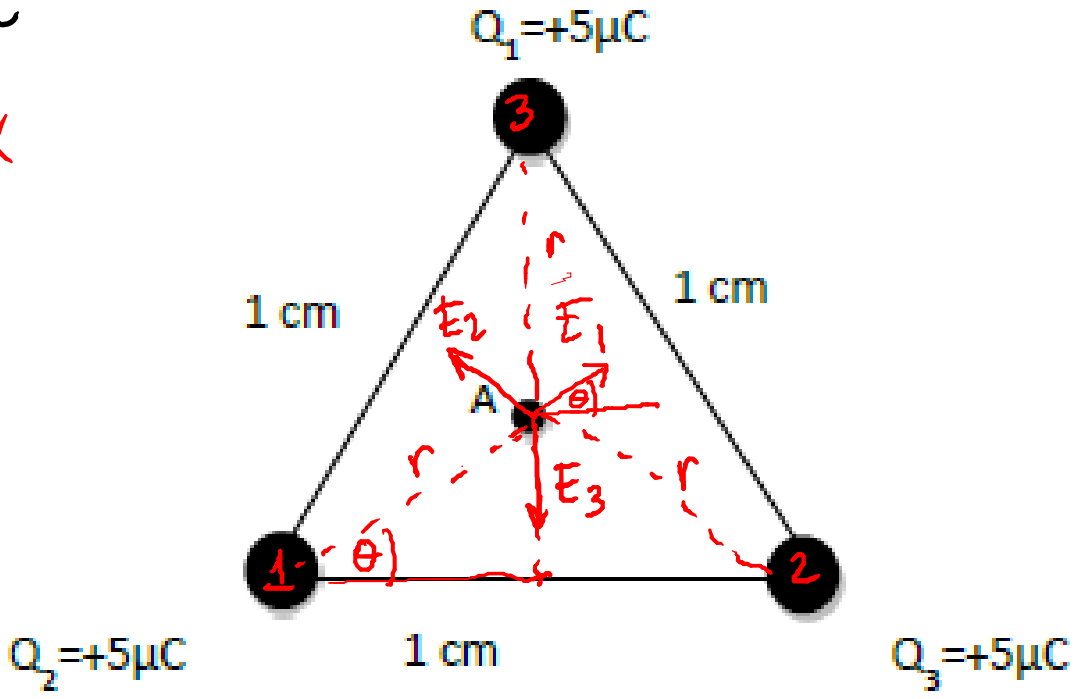
$\Delta M = |M(t) - M_0|$

$\Delta M(t) / m_{Th} \rightarrow$ # decays



$$\tan\theta = \frac{0.25}{1}$$





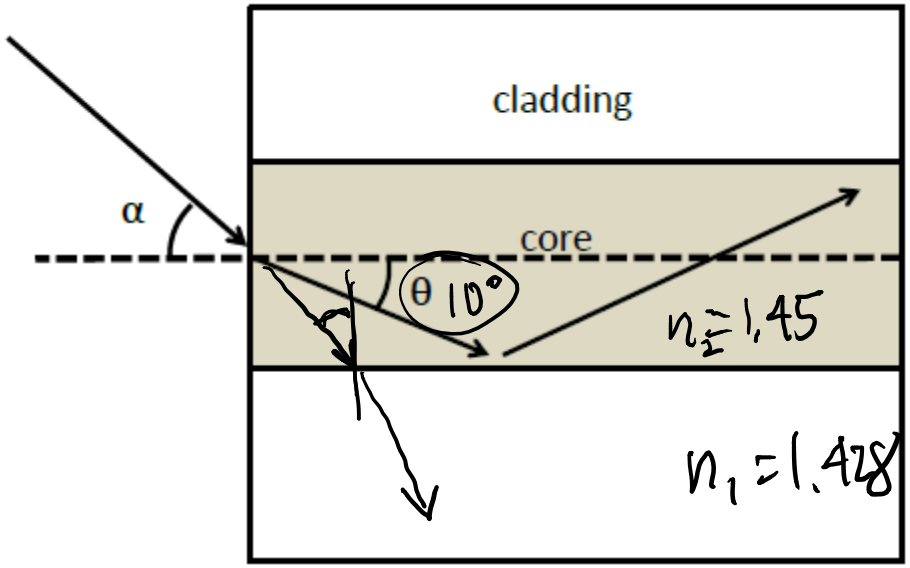
$$E = \sqrt{E_x^2 + E_y^2}$$

$$\tan\theta = \frac{E_y}{E_x}$$

$$E_1 = \frac{kq}{r^2} \qquad E_{1x} = E_1\cos\theta \qquad E_{1y} = E_1\sin\theta$$

$$E_x = E_{1x} + E_{2x} + E_{3x} \qquad E_y = E_{1y} + E_{2y} + E_{3y}$$

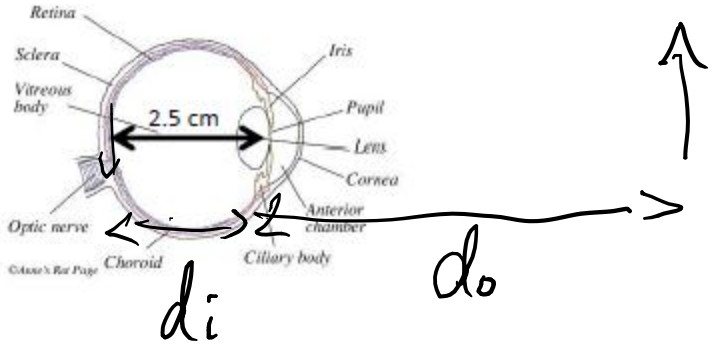
$n = 1.5$

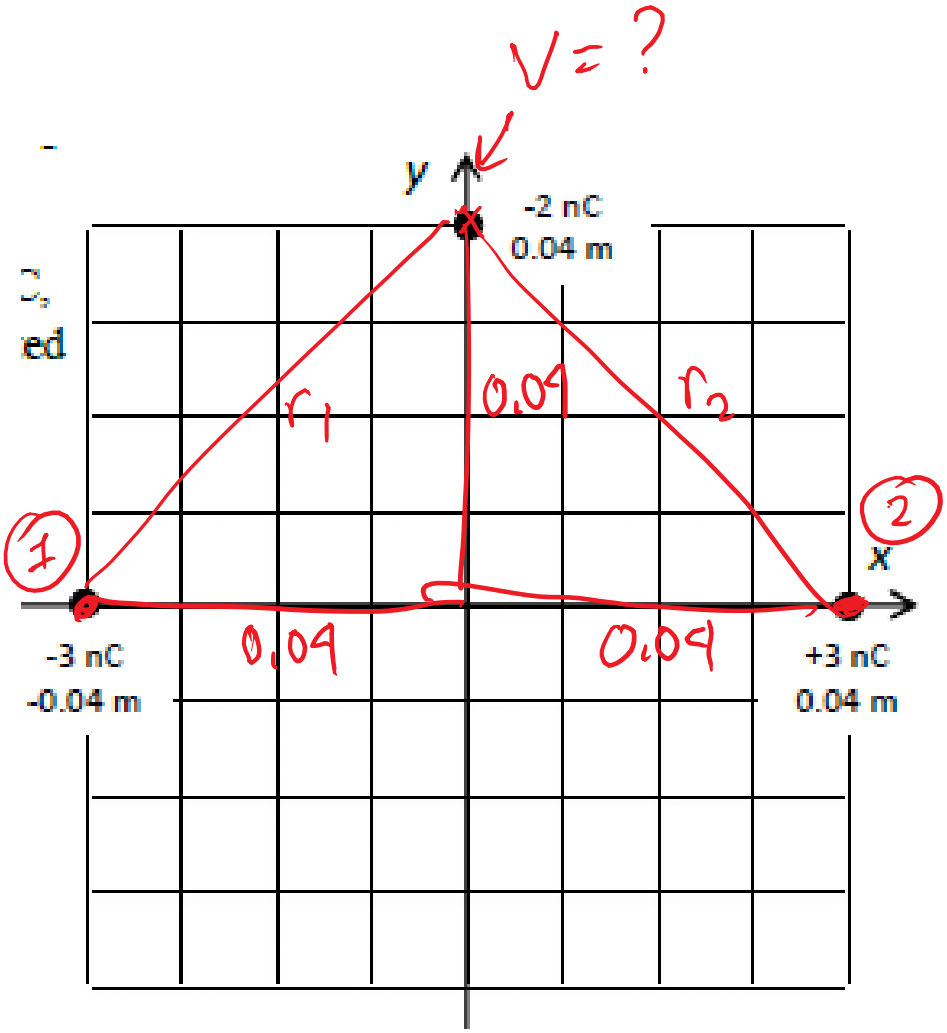


$1.5 = n$

$\sin\theta_c = \frac{n_1}{n_2}$

$n_1 = n_2 \sin\theta = 1.45 \sin 80°$

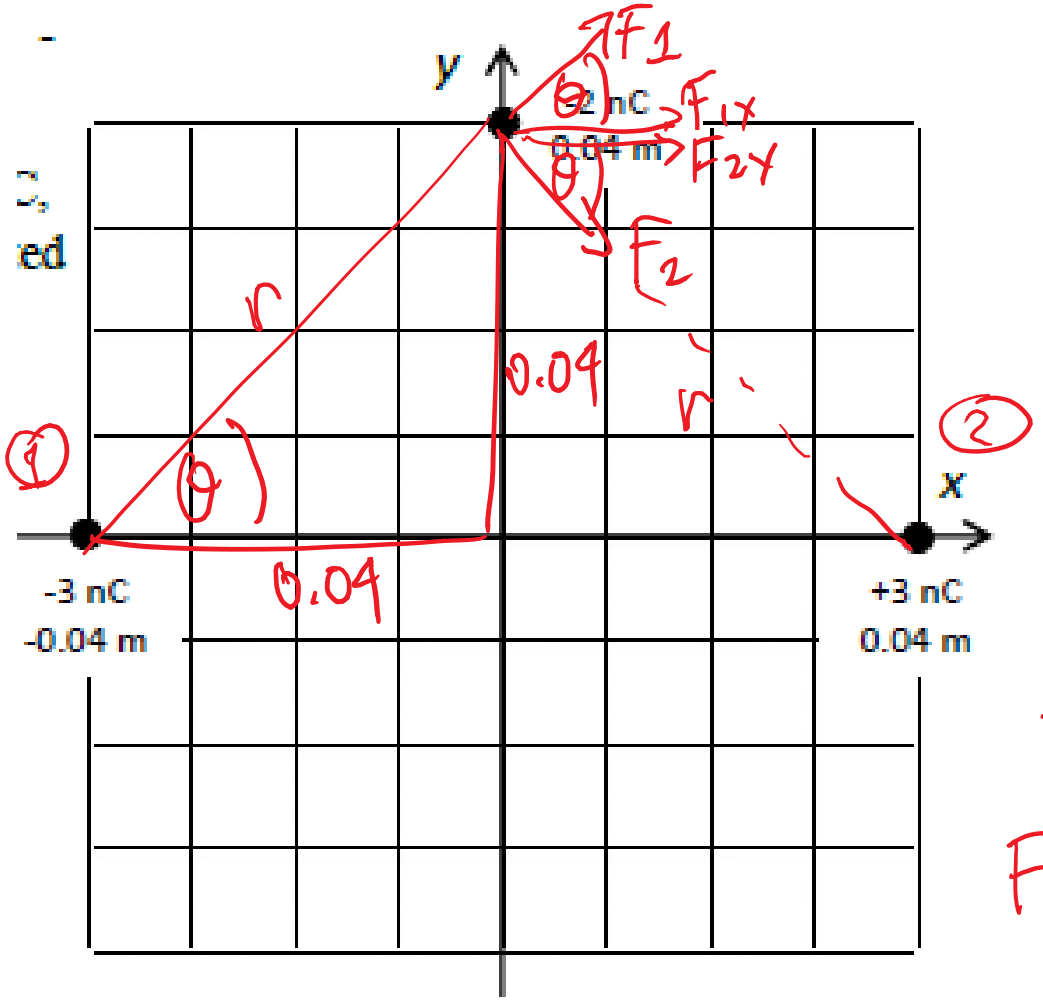

Retina
Sclera
Vitreous body
2.5 cm
Iris
Pupil
Lens
Cornea
Anterior chamber
Optic nerve
Choroid
Ciliary body
©Anne's Rat Page
di
do



$$V = \frac{kq}{r}$$

$$\frac{kq_1}{r_1} + \frac{kq_2}{r_2} = V$$

$$V = \frac{k}{r}(q_1 + q_2) = 0$$



$$F = \frac{k|q_1||q_2|}{r^2}$$

$$F_1 = F_2$$

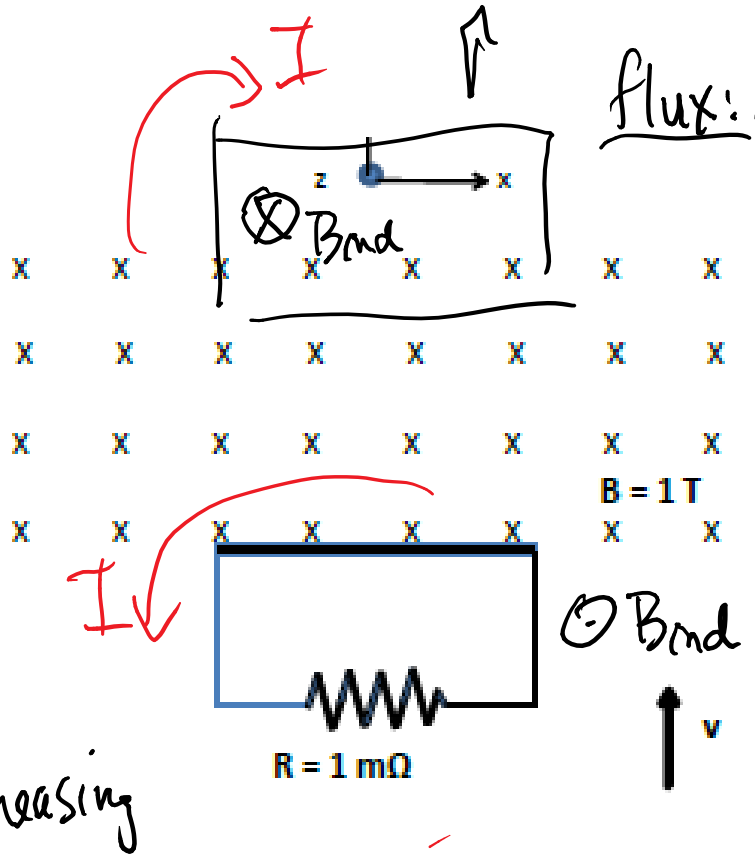
$$F_{1x} + F_{2x} = F_x$$

$$F_1 = F_2 = \frac{k(3nC)\cdot(2nC)}{r^2}$$

$$F_{1x} = F_{2x} = F_1 \cos\theta$$

$$r = \sqrt{0.04^2 + 0.04^2}$$

$$\theta = 45^\circ$$



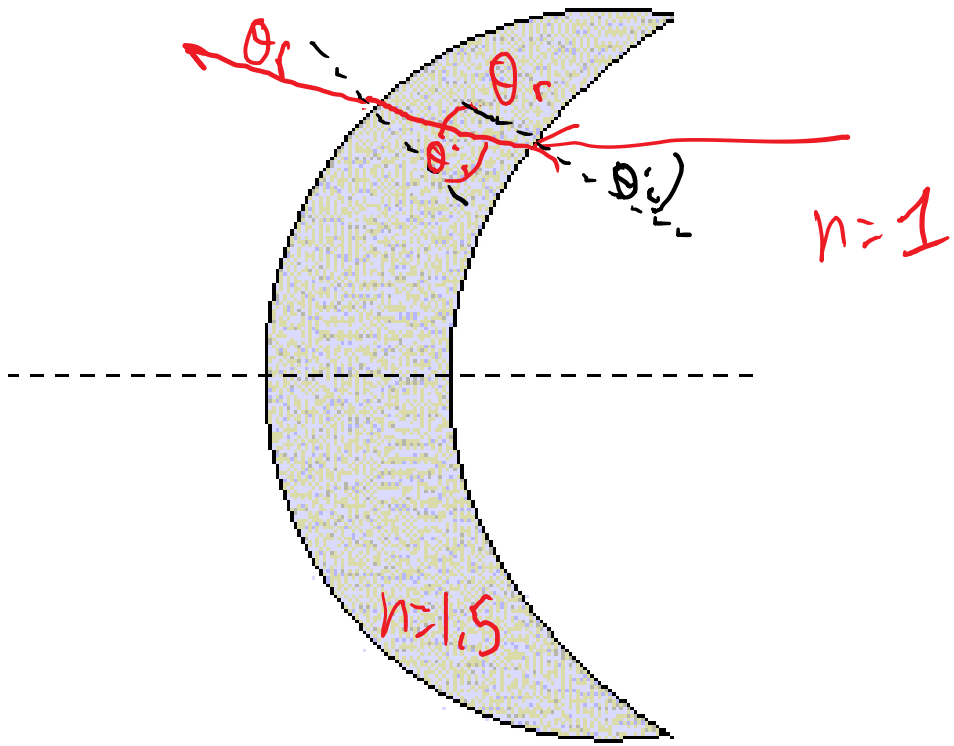
flux: decreasing

induced field along external field

flux: increasing

induced field opposite external field

$B_{ind} \rightarrow R \uparrow R \rightarrow$ current


θ_i
θ_r
θ_i
θ_i
$n=1$
$n=1,5$