$$\Phi_B = \int \mathbf{B} \bullet \mathbf{da}$$

$$\mathscr{E} = -\frac{d\Phi_B}{dt}$$

$$\mathscr{E}_L = -L\frac{dI}{dt}$$

$$I = \frac{\mathscr{E}}{R}\left(1 - e^{-t/\tau}\right)$$

$$\tau = \frac{L}{R}$$

$$\tau = RC$$

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

$$I_{\max} = \frac{\Delta V_{\max}}{R}$$

$$I_{\max} = \frac{\Delta V_{\max}}{X}$$

$$X_L = \omega L$$

$$X_C = \frac{1}{\omega C}$$

$$\oint \mathbf{B}.d\mathbf{s} = \mu_0 I + \mu_0 \varepsilon_0 \frac{d\Phi_E}{dt}$$

$$\oint \mathbf{B} \bullet d\mathbf{a} = 0$$

$$\oint \mathbf{E} \bullet d\mathbf{a} = \frac{q}{\varepsilon_o}$$

$$c = \frac{1}{\sqrt{\mu_0 \varepsilon_0}}$$

$$\mathbf{S} = \frac{1}{\mu_0}\mathbf{E} \times \mathbf{B}$$

$$u_E = \frac{\varepsilon_0 E^2}{2},\ u_B = \frac{B^2}{2\mu_0}$$

$$n = \frac{c}{v}$$

$$n_1 \sin\theta_1 = n_2 \sin\theta_2$$

$$M = \frac{h'}{h} = -\frac{q}{p}$$

$$\frac{1}{p} + \frac{1}{q} = \frac{1}{f}$$

Power in diopters = $\frac{1}{f}$

$$\delta = d \sin\theta = \left(m + \frac{1}{2} \right) \lambda$$

$$\delta = d \sin\theta = m\lambda$$