Formula Sheet for Magnetic Induction Test

$$B_{\text{current-carrying wire}} = \frac{\mu_o}{2\pi}\frac{i}{r}$$

$$B_{coil} = \mu_o n i$$

$$F_{\text{chg moving in B-fld}} = q\vec{v}x\vec{B}$$

$$F_{\text{current-carrying wire in B-fld}} = i\vec{L}x\vec{B}$$

$$\mu_o = 4\pi x10^{-7}\frac{T \bullet m}{A}$$

$$\Phi_B = \vec{B} \cdot \vec{A}$$

$$\varepsilon = -N\frac{\Delta\Phi_B}{\Delta t}$$

$$\varepsilon = -L\frac{\Delta i}{\Delta t}$$

$$\tau_L = \frac{L}{R_{net}}$$