$$V = IR$$
$$p = vi$$
$$W_C = \frac{1}{2}CV^2$$
$$R_{eq,serie} = \sum R_k$$
$$R_{eq,\|} = \left(\sum \frac{1}{R_k}\right)^{-1}$$
$$V_i = \frac{R_i}{\sum R} V_{tot}$$
$$V_m = \frac{\sum A}{\sum \frac{1}{R}}$$
$$V = \frac{V_{max}}{\sqrt{2}}$$
$$v(t) = \sqrt{2}V \cdot \cos(wt + \varphi_v)$$
$$v(t) = Re(\sqrt{2}Ve^{j\phi}e^{jwt}) = Re(\sqrt{2}\overline{V}e^{jwt})$$
$$\overline{V} = Ve^{j\varphi_v} = R\overline{I}$$
$$\overline{I} = Ie^{j\varphi_i}$$
$$\overline{V}_L = jwL\overline{I} = jX_L\overline{I}$$
$$\overline{V}_C = -\frac{j\overline{I}}{wC} = -jX_C\overline{I}$$
$$w = 2\pi f$$
$$\overline{Z} = R + j(X_L - X_C)$$
$$Z = |\overline{Z}| = \sqrt{R^2 + (X_L - X_C)^2}$$
$$\varphi_I = \arctan\left(\frac{I_{im}}{I_{Re}}\right)$$
$$\overline{V} = \overline{Z}\overline{I}$$
$$\varphi_I = \varphi_V - \varphi$$
$$\cos\varphi = \frac{P}{VI}$$
$$P = VI\cos\varphi$$
$$\overline{A} = \overline{V} \cdot \underline{I} = \frac{V^2}{\underline{Z}} = \overline{Z}I^2 = P + jQ$$
$$A = \sqrt{P^2 + Q^2} = VI$$
$$P = VI\cos\varphi$$
$$Q = VI\sin\varphi$$
$$P = \frac{V^2}{R} = RI^2$$
$$Q = XI^2 = \frac{V^2}{X}$$
$$C = \frac{Q_{carico} - P \cdot \tan(\arccos(0,9))}{w \cdot V_g^2}$$
$$\overline{Z}_Y = \frac{\overline{Z}_\triangle}{3}$$
$$\text{Wattmetro} = W = Re(\overline{V} \cdot \underline{I})$$
$$\varphi = \arctan\frac{Q_{tot}}{P_{tot}}$$
$$C_{\triangle rif} = \frac{C_{Yrif}}{3}$$
$$x(t) = (x(0^+) - x(\infty)) \cdot e^{-\frac{t}{\tau}} + x(\infty)$$
$$\tau = R_{eq}C$$
$$\tau = \frac{L}{R_{eq}}$$
$$\frac{B}{\mu} \cdot l = NI$$
$$\varphi = BA$$
$$U = \theta \cdot \varphi$$
$$\theta = \frac{1}{\mu}\frac{l}{A}$$
$$W = \frac{1}{2}Li^2$$
$$L = \frac{N\varphi}{i} = \frac{N^2}{\theta}$$
$$L_m = \frac{N_2\varphi_2}{I_1} = \frac{N_1\varphi_1}{I_2} = \frac{N_1N_2}{2\theta_{eq2}}$$
$$W = \frac{1}{2}L_{11}i_1 + L_mi_1i_2 + \frac{1}{2}L_{22}i_2^2$$
$$F = \frac{\varphi^2}{2\mu_oA_{Fe}} = -\frac{B^2}{2\mu_o}A_{Fe}$$
$$\frac{v_1}{v_2} = \frac{N_1}{N_2} = \frac{i_2}{i_1} = k$$
$$A_n = V_{1n}I_{1n} = V_{2n}I_{2n}$$
$$R_1 = R_{\to 2}K^2$$
$$e = Blu$$
$$F = Bli$$
$$e_{tot} = Blw2RN$$
$$T_{tot} = Bli_2RN$$
$$i_{0\%} = \frac{I_{10}}{I_{1n}} \cdot 100\%$$
$$R_{Fe} = \frac{V_{1n}^2}{P_0}$$
$$X_{Fe} = \frac{V_{1n}^2}{Q_0}$$
$$V_{cc\%} = \frac{V_{cc2}}{V_{2n}} \cdot 100\%$$
$$R_{cc} = \frac{P_{cc}}{I_{2n}^2}$$
$$X_{cc} = \frac{Q_{cc}}{I_{2n}^2}$$
$$\cos(\varphi_0) = \frac{P_0}{V_{1n}I_{10}}$$
$$\cos(\varphi_{cc}) = \frac{P_{cc}}{V_{cc2}I_{2n}}$$
$$\mu_0 = 1.2566 \times 10^{-6}$$