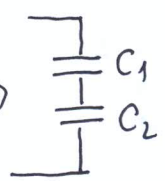
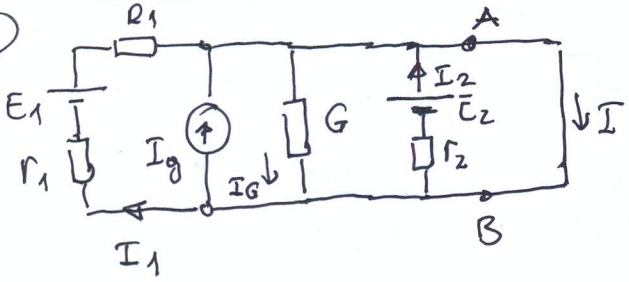
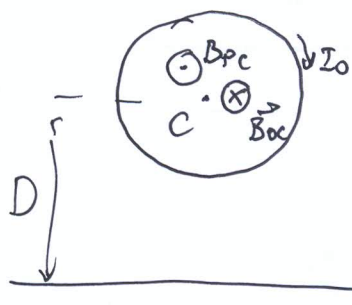
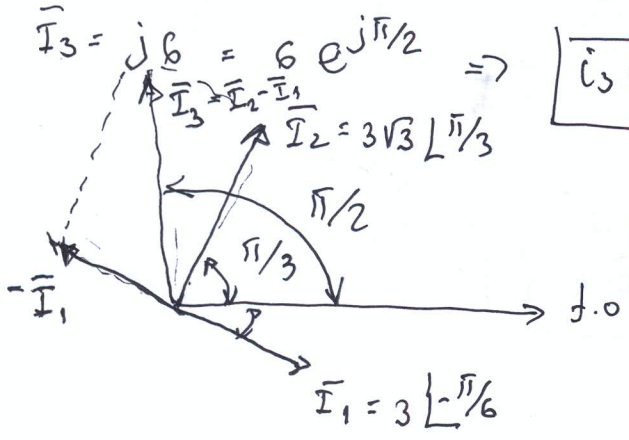


① $C \Rightarrow$  $C_1 = \epsilon_1 \frac{2S}{d}$ $C_2 = \epsilon_2 \frac{2S}{d}$ $C = \frac{C_1 \cdot C_2}{C_1 + C_2} = \frac{\epsilon_1 \cdot \epsilon_2}{\epsilon_1 + \epsilon_2} \cdot \frac{2S}{d}$ (10)

②  $V_{AB} = 0 \Rightarrow I_G = G \cdot V_{AB} = 0$
 $E_1 - (r_1 + R_1)I_1 = 0 \Rightarrow I_1 = \frac{E_1}{r_1 + R_1}$
 $E_2 - r_2 I_2 = 0 \Rightarrow I_2 = \frac{E_2}{r_2}$
 $I = I_1 + I_G - I_G + I_2 = \frac{E_1}{r_1 + R_1} + I_G + \frac{E_2}{r_2}$ (20)

③  $\vec{B}_c = 0 \Rightarrow \vec{B}_{oc} + \vec{B}_{pc} = 0$
 $B_{oc} = B_{pc} \Rightarrow \frac{I_0}{2R} = \frac{I_p}{2\pi D} \Rightarrow I_p = \frac{\pi D}{R} I_0$
 \vec{B}_{pc} мер окупират мерз \vec{B}_{oc} мерз
 мер I_p мерз I_0 мерз R мерз D мерз

④ $i_3(t) = i_2(t) - i_1(t) \Rightarrow \bar{I}_3 = \bar{I}_2 - \bar{I}_1$ $\bar{I}_2 = 3\sqrt{3} e^{j\pi/3}$ $\bar{I}_1 = 3 e^{j\pi/6}$ (25)
 $\bar{I}_2 - \bar{I}_1 = 3 \left[\sqrt{3} \left(\frac{1}{2} + j\frac{\sqrt{3}}{2} \right) - \left(\frac{\sqrt{3}}{2} - j\frac{1}{2} \right) \right] = 3 \left[j\frac{3}{2} + j\frac{1}{2} \right] = j6$



$i_3(t) = \sqrt{6} \sin(100\pi \cdot t + \pi/2)$

⑤ $W_0 = \frac{1}{2} L I_0^2$ (25)
 $W_2 = \frac{1}{2} L (i(t_2))^2 \quad i(t) = I_0 e^{-t/\tau}$
 $W_2 = \frac{1}{2} L I_0^2 e^{-2t/\tau}$
 $W_2 = W_0 e^{-2}$ $t_2 = \tau = \frac{L}{R} = 1ms$

$\frac{1}{2} L I_0^2 e^{-2t/\tau} = \frac{1}{2} L I_0^2 e^{-2} \Rightarrow \frac{t_2}{\tau} = 1$
 I_0 мерз R мерз L мерз t_2 мерз τ мерз