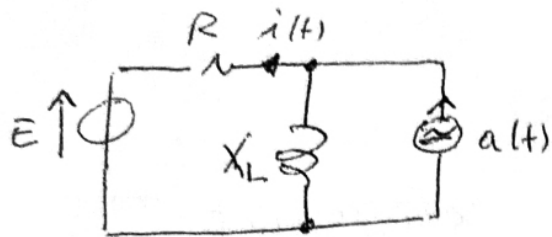
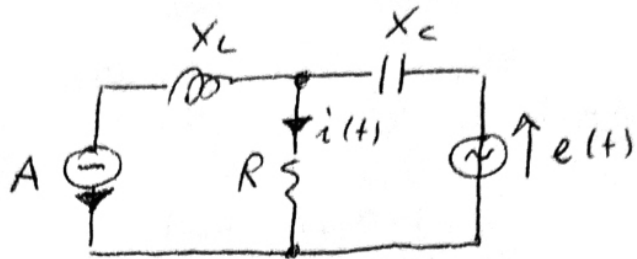


① DETERMINARE $i(t)$

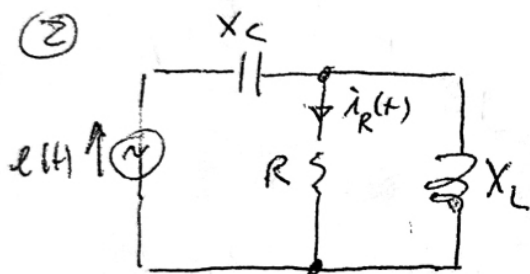


$$\begin{aligned} E &= 100 \text{ V} \\ X_L &= R = 10 \Omega \\ a(t) &= 100 \sin \omega t \\ \omega &= 314 \text{ rad/s} \end{aligned}$$

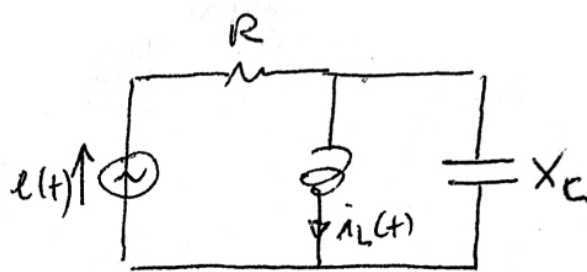


$$\begin{aligned} A &= 10 \text{ A} \\ X_L &= R = |X_C| = 10 \Omega \\ e(t) &= 100 \sin \omega t \\ \omega &= 400 \text{ rad/s} \end{aligned}$$

②

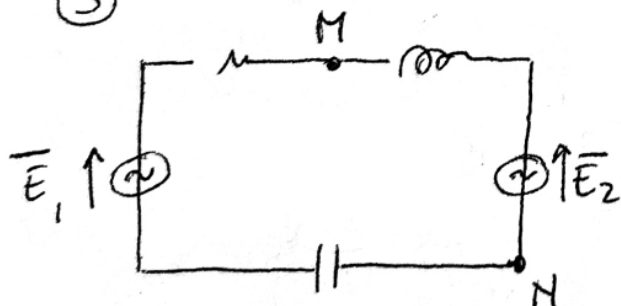


$$\begin{aligned} e(t) &= 100 \sin \omega t \\ X_L &= |X_C| = R = 20 \Omega \\ f &= 50 \text{ Hz} \\ \text{DETERMINARE } i_R(t) \text{ e } L \end{aligned}$$

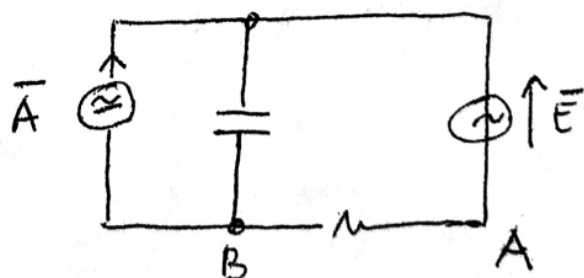


$$\begin{aligned} e(t) &= 50 \sin \omega t \\ R &= 5 \Omega \\ X_L &= |X_C| = 20 \Omega \quad f = 50 \text{ Hz} \\ \text{DETERMINARE } i_L(t) \text{ e } C \end{aligned}$$

③



$$\begin{aligned} \bar{E}_1 &= 100 \text{ V} \\ \bar{E}_2 &= 100 \angle \pi/2 \\ R &= X_L = 10 \Omega \quad |X_C| = 20 \Omega \\ \text{DETERMINARE } \bar{V}_{MN} \end{aligned}$$



$$\begin{aligned} \bar{A} &= 10 \text{ A} \\ \bar{E} &= 100 \angle \pi/4 \\ R &= |X_C| = 10 \Omega \\ \text{DETERMINARE } \bar{V}_{AB} \end{aligned}$$

④ DETERMINARE L'AMMETTERA

$$\begin{array}{l|l} v(t) = 100 e \sin(314t + \pi/8) & v(t) = 30\sqrt{2} \sin(\pi t - \pi) \\ i(t) = 2\pi \sin(314t - \pi/6) & i(t) = 2\pi \cos(\pi t) \end{array}$$

⑤ DETERMINARE $i(t)$

$$\begin{array}{l|l} v(t) = 400 \sin(100t - \pi/4) \text{ V} & v(t) = 20 \sin(40t + \frac{5\pi}{6}) \text{ V} \\ \bar{Z} = +2 - j \Omega & \bar{Z} = 1 + j3 \Omega \end{array}$$

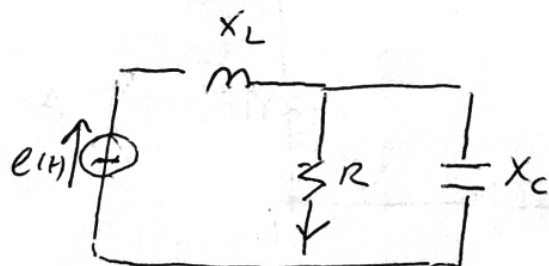
⑥ DETERMINARE L'ESPRESSIONE DELLA SINUSOIDE RISULTANTE

$$\begin{array}{l|l} i_1(t) = 20 \cos(4t + \pi/3) - \sqrt{3} \sin 4t & i_1(t) = -5 \sin 2t - 2 \cos(2t - \pi/4) \\ i_2(t) = \sin 3t + 2 \cos 3t & i_2(t) = \cos 5t - 2 \sin 5t \end{array}$$

⑦ det. impedenza e ammettenza.

$$\begin{array}{l} v(t) = 100\pi \sin(314t + \pi/4) \\ i(t) = 10e \sin(314t - \pi/6) \end{array}$$

⑧



$$e(t) = 50 \sin \omega t \text{ V}$$

$$R = 5 \Omega$$

$$X_L = |X_C| = 20 \Omega \quad f = 50 \text{ Hz}$$

determinare i_R e i_C