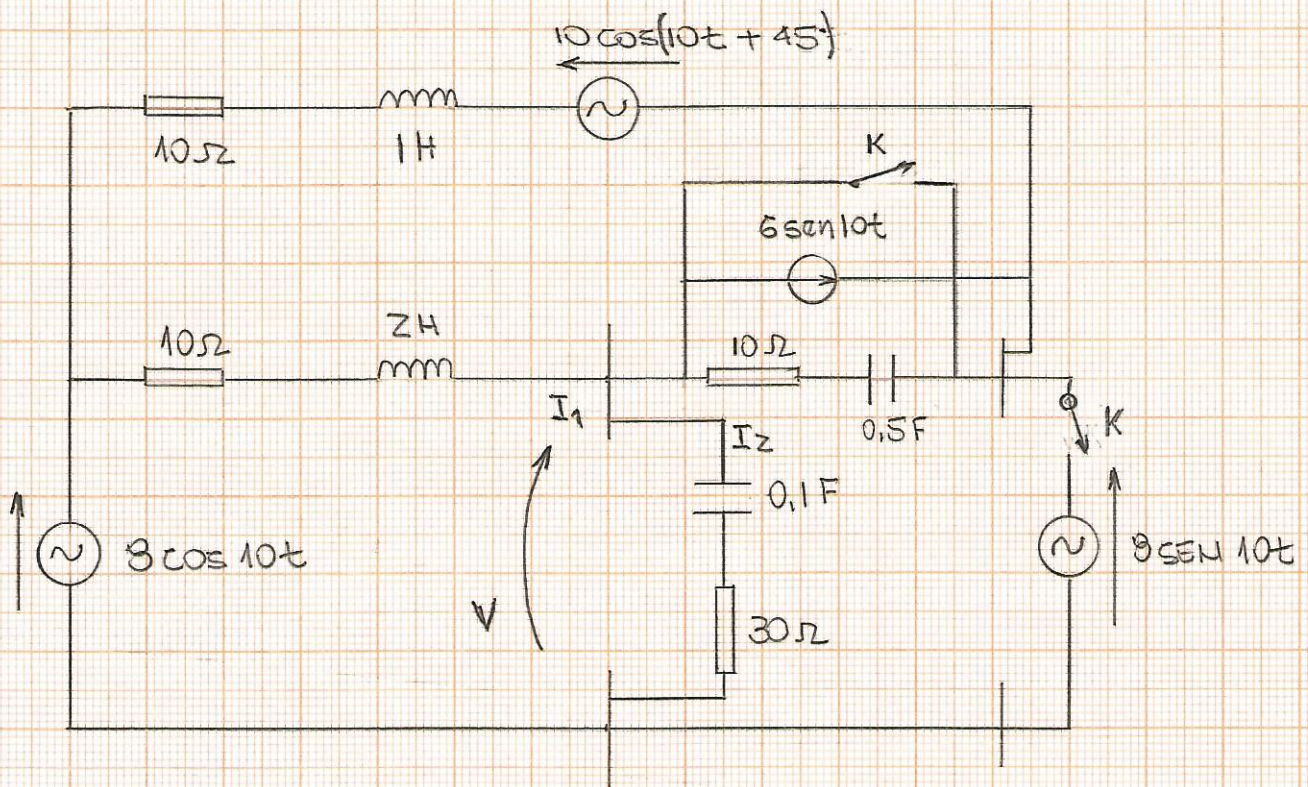
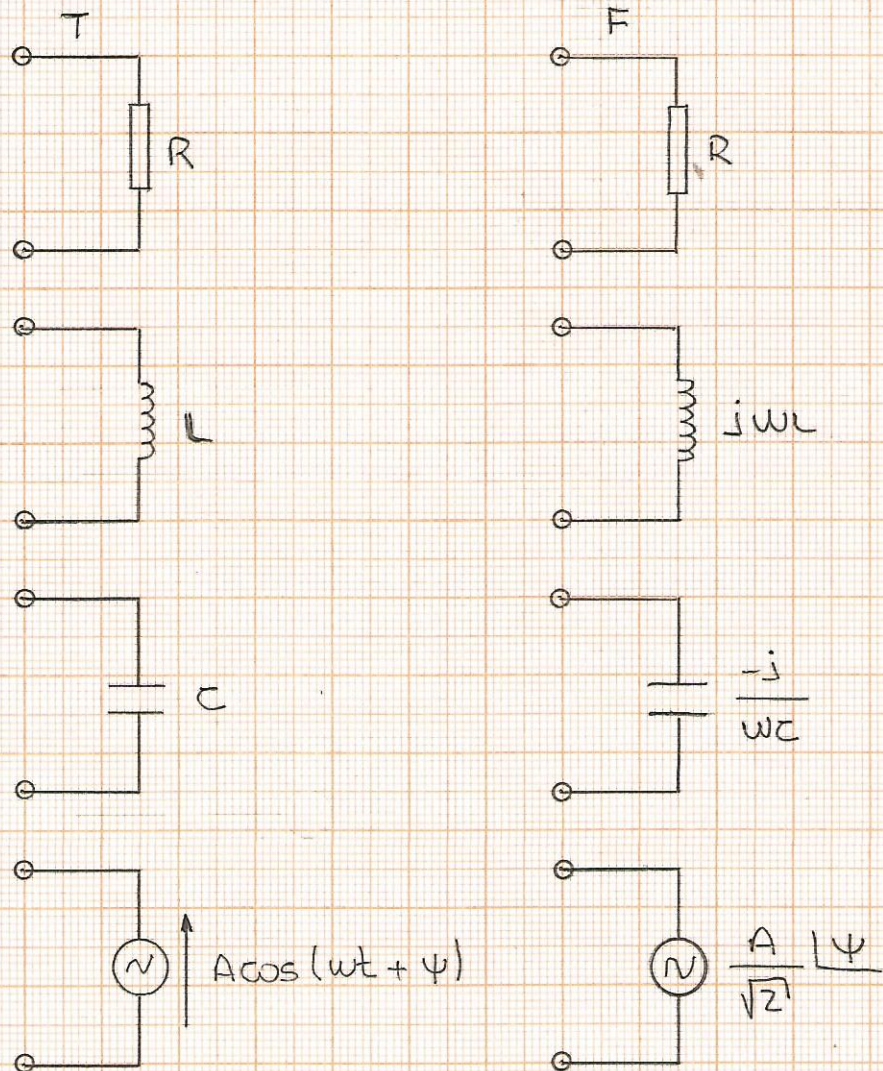


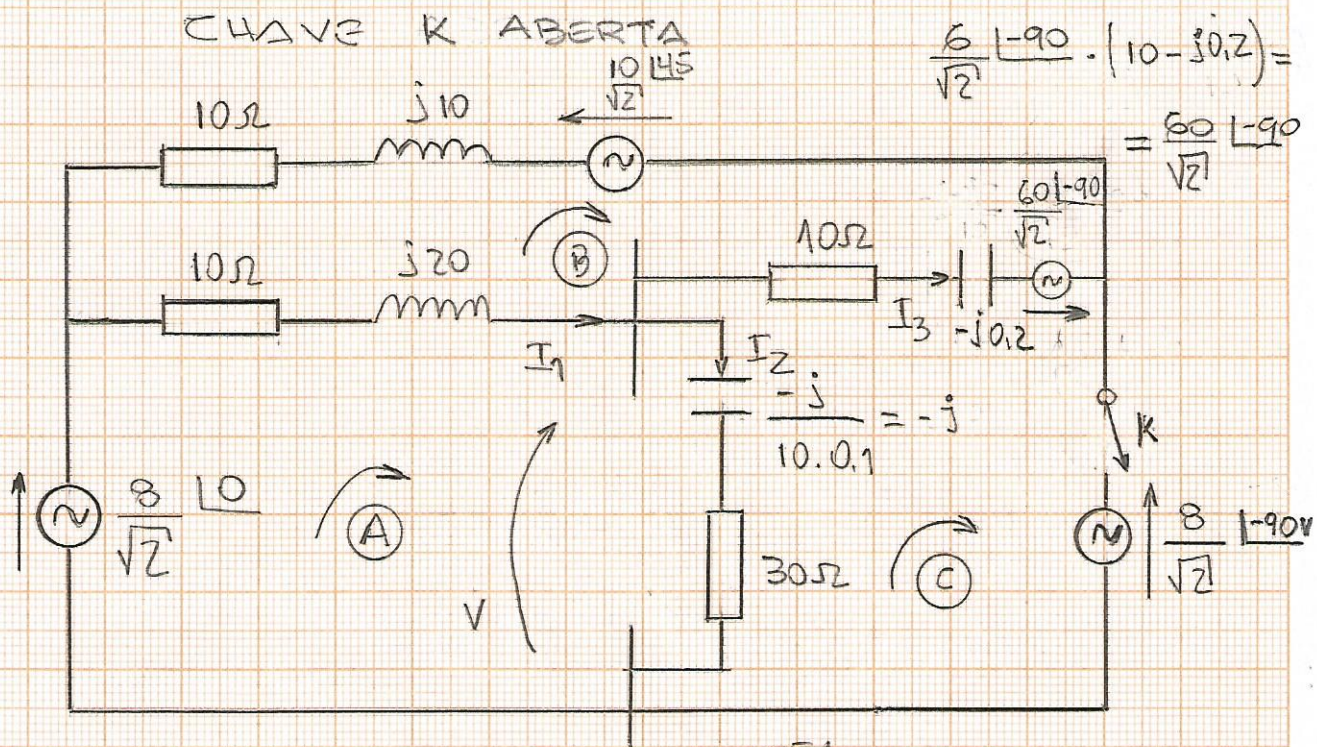
AULA 4 - EXERCÍCIO DE APLICAÇÃO



SEMPRE SIMPLIFICAR  
(PASSAR PARA O DOMÍNIO DAS FREQUÊNCIAS)

USAR  
SEMPRE





$$v = 8 \sin 10t \rightarrow 8 \cos (\pi/2 - 10t) \rightarrow 8 \cos - (10t - \pi/2) \rightarrow 8 \cos (10t - \pi/2) = \frac{8}{\sqrt{2}} \angle -\pi/2$$

$$v = 8 \sin 10t \rightarrow \Delta \text{ MESMA COISA}$$

$$v = \frac{8}{\sqrt{2}} \angle -\pi/2$$

TEMOS SOMENTE 2 MALHAS (A e B)

APLICANDO A TEORIA JA VISTA

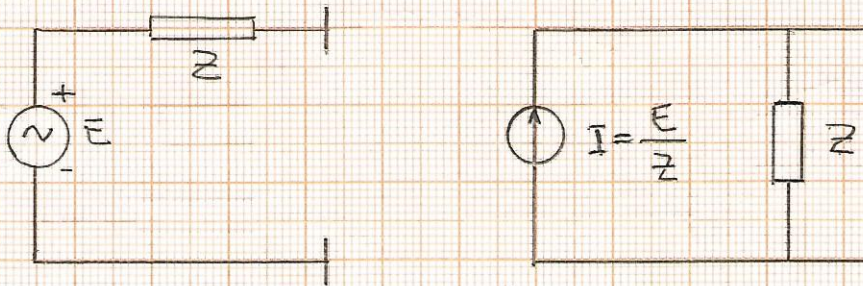
MONTAMOS MATRIZ [R] 2x2

	A	B		
A	$10 + j20$	$-(10 + j20)$	$I_A$	$\frac{8}{\sqrt{2}} \angle 0$
B	$-(10 + j20)$	$10 + j20$ $10 - j0.1$ $10 + j10$	$I_B$	$\frac{10}{\sqrt{2}} \angle 45 - \frac{60}{\sqrt{2}} \angle -90$

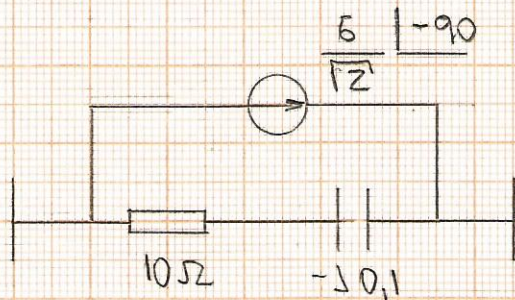
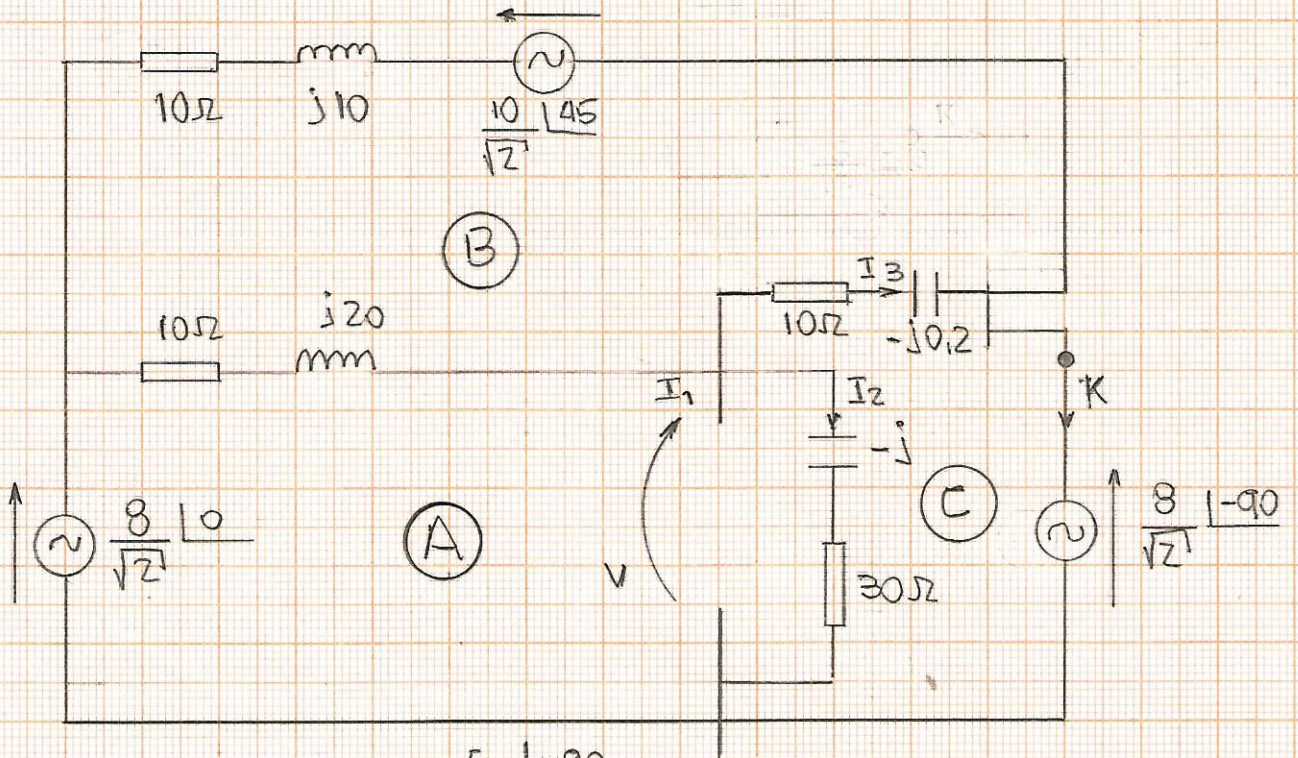
$$I_1 = I_A - I_B$$

$$I_2 = I_A$$

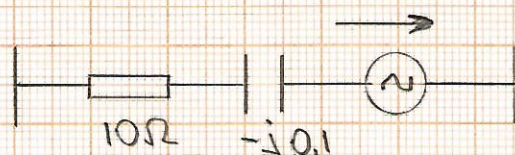
# EQUIVALÊNCIA ENTRE FOLTES



CHAVE K FECHADA



EQUIVALENTE



$$\frac{6}{\sqrt{2}} \angle -90 \cdot (10 - j0.1) = \frac{60}{\sqrt{2}} \angle -90$$

COM CHAVE K FECHADA

TEMOS A MATRIZ  $[R]$   $3 \times 3$

	A	B	C		
A	$10 + j20$ $-j + 30$	$-(10 + j20)$	$-(30 - j)$	$I_A$	$\frac{8 \angle 0}{\sqrt{2}}$
B	$-(10 + j20)$	$10 + j20$ $10 + j0,2$ $10 + j10$	$-(10 - j0,2)$	$I_B$	$-\frac{10 \angle 45}{\sqrt{2}}$
C	$-(30 - j)$	$-(10 - j0,2)$	$-j + 30$ $10 - j0,2$	$I_C$	$-\frac{8 \angle 90}{\sqrt{2}}$

$$V = (30 - j)I_1$$

$$I_1 = I_A - I_B$$

$$I_2 = I_A - I_C$$

$$I_3 = I_C - I_B$$

# CHAVE K FECHADA

TRANSFORMAR GERADOR DE CORRENTE EM GERADOR DE TENSÃO

