

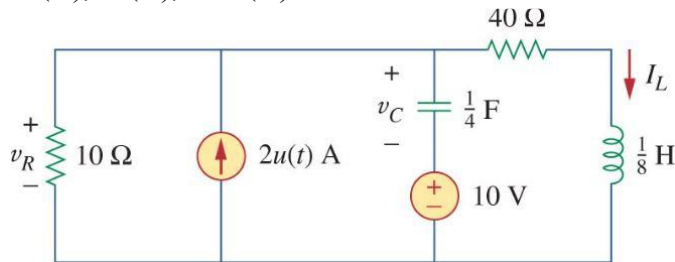
Solução da Lista 6 de Circuitos Elétricos IE

1) Para o circuito da Figura abaixo.

a) $i_L(0+)$, $v_C(0+)$, e $v_R(0+)$,

b) $di_L(0+)/dt$, $dv_C(0+)/dt$ e $dv_R(0+)/dt$,

c) $i_L(\infty)$, $v_C(\infty)$, e $v_R(\infty)$.

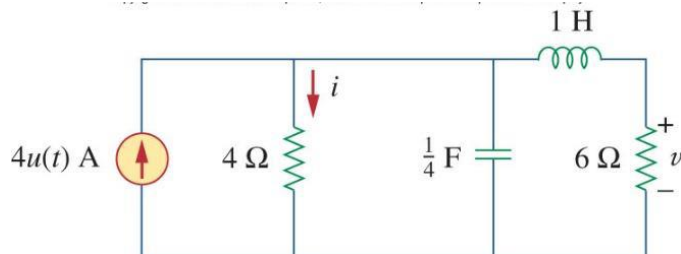


2) Para o circuito da Figura abaixo.

a) $i(0+)$ e $v(0+)$,

b) $di(0+)/dt$ e $dv(0+)/dt$,

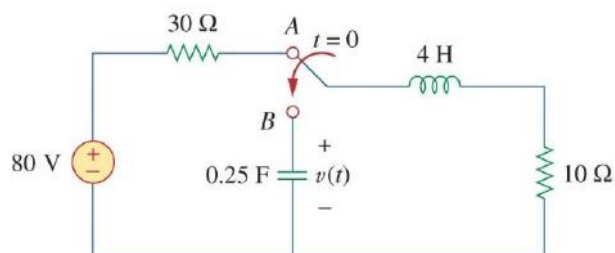
c) $i(\infty)$ e $v(\infty)$,

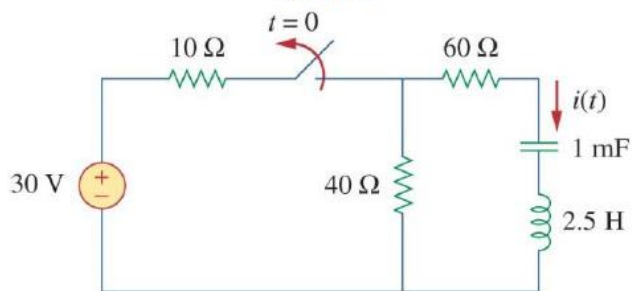
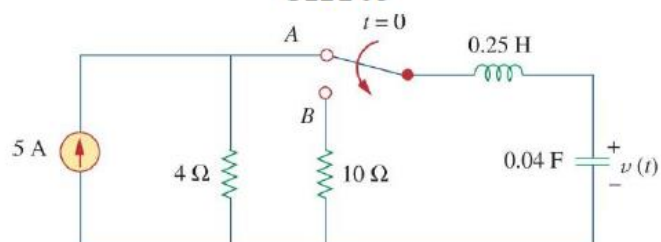
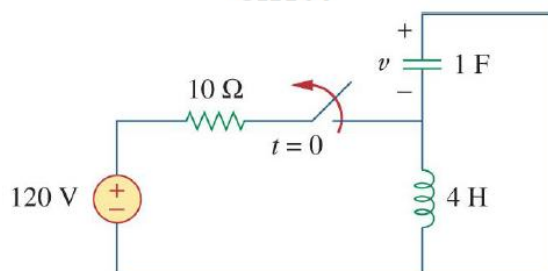
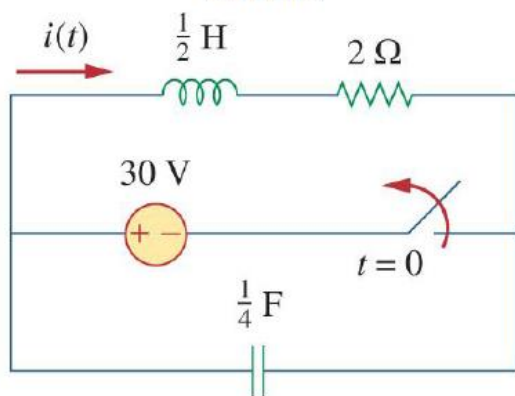


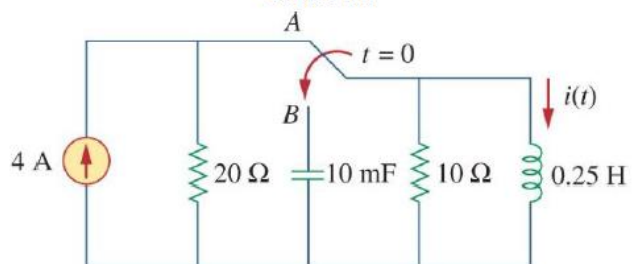
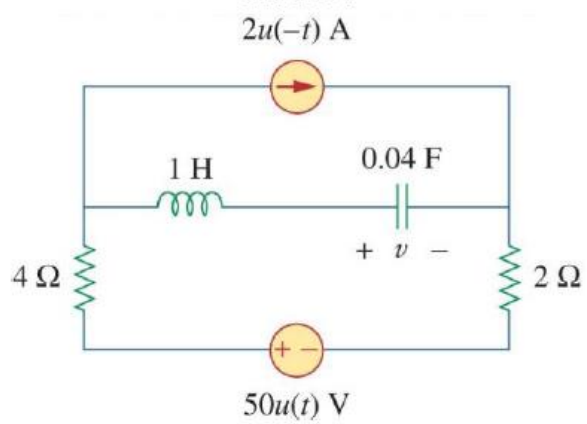
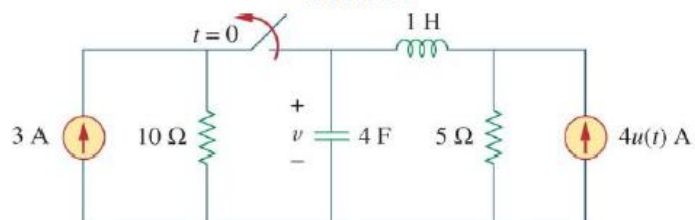
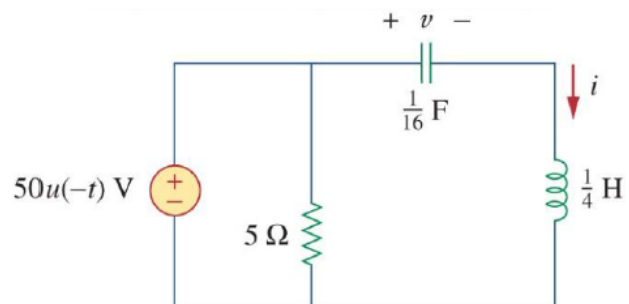
3) Encontre os valores de $i(t)$ e $v(t)$ para $t > 0$ conforme as demarcações nos circuitos a seguir.

CKT01

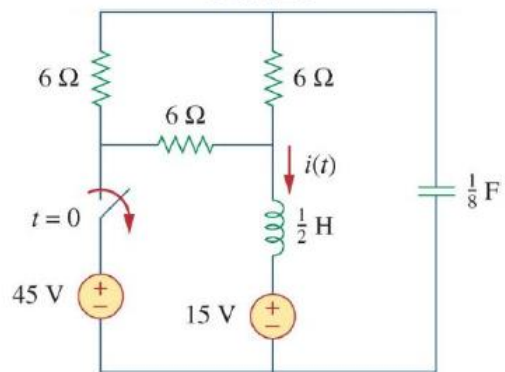
$$v(0) = 0$$



CKT02**CKT03****CKT04****CKT05**

CKT06**CKT07****CKT08****CKT09**

CKT10



- 4) Supondo $R = 2 \text{ k}\Omega$, desenhe um circuito RLC que tenha a equação característica abaixo:

$$s^2 + 100s + 10^6 = 0$$