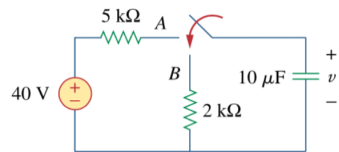
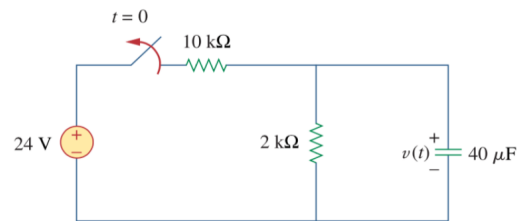


The switch in Fig. 7.84 moves instantaneously from A to B at $t = 0$. Find v for $t > 0$.



1.

The switch in Fig. 7.86 has been closed for a long time, and it opens at $t = 0$. Find $v(t)$ for $t \geq 0$.



2.

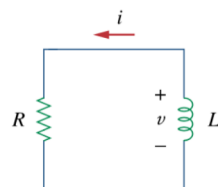
In the circuit of Fig. 7.93,

$$v(t) = 20e^{-10^3 t} \text{ V}, \quad t > 0$$

$$i(t) = 4e^{-10^3 t} \text{ mA}, \quad t > 0$$

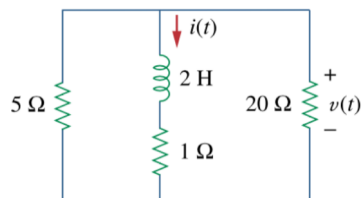
(a) Find R , L , and τ .

(b) Calculate the energy dissipated in the resistance for $0 < t < 0.5 \text{ ms}$.



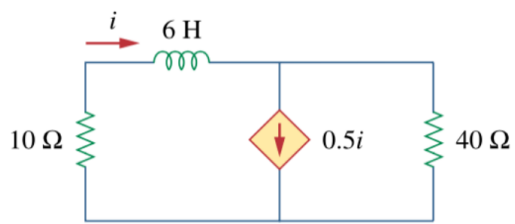
3.

Find $i(t)$ and $v(t)$ for $t > 0$ in the circuit of Fig. 7.102 if $i(0) = 10 \text{ A}$.



4.

In the circuit of Fig. 7.99, find $i(t)$ for $t > 0$ if $i(0) = 2$ A.



5.