Chapter 7, Problem 13.

In the circuit of Fig. 7.93,

$v(t) = 80e^{-1000t}$ V for all $t > 0$.

$i(t) = 5e^{-1000t}$ mA for all $t > 0$.

(a) Find R, L, and τ

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

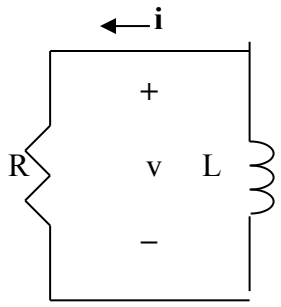

Figure 7.93
For Prob. 7.13.