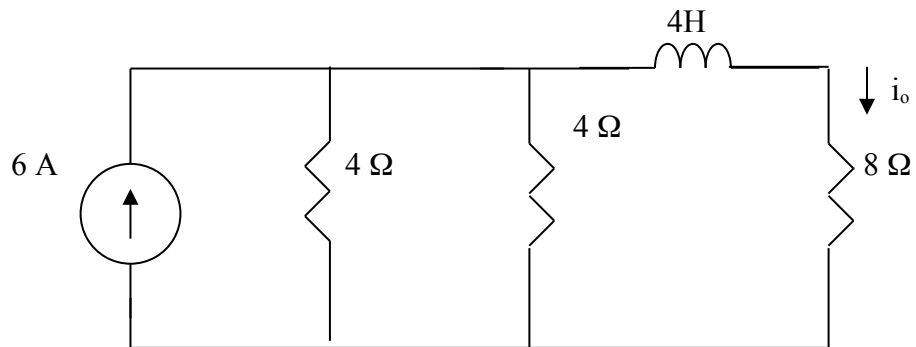
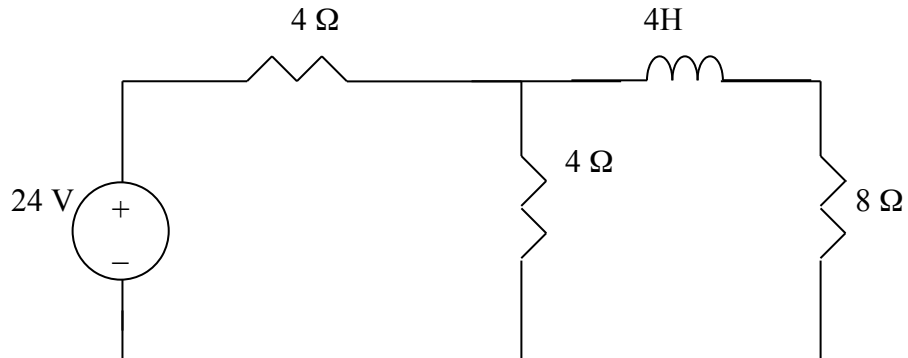


### Chapter 7, Solution 11.

For  $t < 0$ , we have the circuit shown below.



$$4 \parallel 4 = 4 \times 4 / 8 = 2$$

$$i_o(0^-) = [2 / (2 + 8)] 6 = 1.2\text{ A}$$

For  $t > 0$ , we have a source-free RL circuit.

$$\tau = \frac{L}{R} = \frac{4}{4 + 8} = 1/3 \text{ thus,}$$

$$i_o(t) = 1.2e^{-3t} \text{ A.}$$