

## Chapter 6, Solution 60

$$L_{eq} = 3 // 5 = \frac{15}{8}$$

$$v_o = L_{eq} \frac{di}{dt} = \frac{15}{8} \frac{d}{dt} (4e^{-2t}) = \underline{-15e^{-2t}}$$

$$i_o = \frac{1}{L} \int_0^t v_o(t) dt + i_o(0) = 2 + \frac{1}{5} \int_0^t (-15)e^{-2t} dt = 2 + 1.5e^{-2t} \bigg|_0^t$$

$$i_o = \underline{(0.5 + 1.5e^{-2t}) \text{ A}}$$