

**Chapter 7, Solution 46.**

$$\tau = R_{Th}C = (2 + 6) \times 0.25 = 2s, \quad v(0) = 0, \quad v(\infty) = 6i_s = 6 \times 5 = 30$$

$$v(t) = v(\infty) + [v(0) - v(\infty)]e^{-t/\tau} = \underline{30(1 - e^{-t/2})} u(t) \text{ V}$$