Chapter 6, Solution 7.

$$v = \frac{1}{C} \int idt + v(t_o) = \frac{1}{25x10^{-3}} \int_0^t 5tx10^{-3} dt + 10$$
$$= \frac{2.5t^2}{25} + 10 = [\mathbf{0.1t^2 + 10}] \mathbf{V}.$$