Chapter 7, Solution 10.

For t<0, $$v(0^-) = \frac{3}{3+9}(36V) = \underline{9\ V}$$

For t>0, we have a source-free RC circuit

$$\tau = RC = 3x10^3\, x20x10^{-6} = 0.06s$$

$$v_o(t) = \mathbf{9e^{-16.667t}\ V}$$

Let the time be t_o.

$3 = 9e^{-16.667to}$ or $e^{16.667to} = 9/3 = 3$

$$t_o = \ln(3)/16.667 = \mathbf{65.92\ ms}.$$