EE 211 Circuits and Signals I, Fall 2012 Quiz 10, November 12, 2012

We are considering the same circuit as in Quiz 9 (November 5). For $R = 1 \Omega$, $L = \frac{1}{2}$ H, C = 2 F you (should have) found $\alpha = 1 \text{ s}^{-1}$ and $\omega_n = 1 \text{ s}^{-1}$. Also assume $V_S = 1$ V (size of the step).



Today I want you to plot all the voltage profiles and give initial conditions. In all cases the profiles look (for t > 0) like

$$y(t) = Ae^{-t} + tBe^{-t} + C$$

Note: even if you have trouble computing numerical values, sketching the graphs correctly is possible and will give you a lot of credit.

