EE-3032, HW-3

Convolution

Problems from the Chaparro text:

- 2.14 (page 171).
- 2.16
- Let $h(t) = e^{-t}u(t)$ and $x(t) = e^{-(2(t-2))}u(t-2)$.
 - 1. Sketch both the signal x(t) and the impulse response h(t).
 - 2. Calculate y(t), the system output, using convolution.
 - 3. Sketch y(t).
 - 4. Sketch a plot vs. τ and let t = 3 (constant value). Sketch x(τ) and h(t- τ) on the same plot and use them to explain the value of the output y at t = 3.