Fall, 1997 – Exam 2 Answers

1. (a) $\dfrac{6}{(s-1)^4}$

   (b) $1 - \cos t$

   (c) $\dfrac{1}{2}\left(e^{-3t} - e^{-t}\right)$

2. (a) $x_p(t) = \dfrac{2}{4-\gamma^2}\cos \gamma t$

   (b) 2nd graph

3. $y(t) = 5e^{-4t} + 3te^{-4t} + \dfrac{1}{2}\left[e^{-4(t-2)} - 1\right]u(t-2)$

4. $x(t) = e^{-t},\ y(t) = e^{-t}$