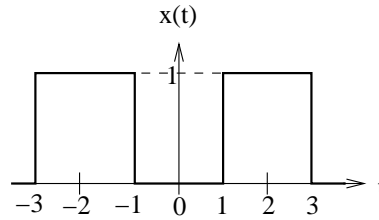EE 30344 — Signals and Systems I

Quiz 6 – October 30, 2006

1. (a) Given $x(t)$, determine $X(j\omega)$.
   (b) What is the FT of the odd part of $x(t)$?

2. Calculate
$$\left(\frac{\sin(\omega T)}{w}\right) * \left(\frac{2\sin(\omega T)}{w}e^{j3\omega T}\right).$$

3. Let $x(t) = e^{-2t}u(t)$ be the input and $h(t) = \delta(t-1)$ be the impulse response of an LTI system. Determine the output $y(t)$ and its FT $Y(j\omega)$.