ASSIGNMENT NO 1

SUBJECT SIGNAL & SYSTEM

DUE DATE: 7TH DEC, 2012

1. Calculate x(t) for the following signal.

y(t) = e-3t u(t) – e-4t u(t), H(jw) = 1/(3+jw)

1. Find the Fourier transform for the following function.

x(t) = e-at cos(wot) u(t)

1. Find the Fourier transform for the following trigonometric function.

x(t) = e-3t sin(2t)u(t) + e3t sin(2t)u(t)

1. Find the Fourier series for the figures 1 to 7.
2. Find the Laplace transform for the following functions.
3. g(t) = u(t) – 2u(t-1) +2u(t-2) -2u(t-3)
4. g(t) = 2tu(t) – 4(t-0.5)u(t-0.5) + 2(t-1)u(t-1)
5. f(t) = (1/6)e-4t + (1/3)e-t –(1/2)e-2t
6. x(t) = 3e-3tu(t) – 2e-tu(t)
7. x(t) = -e-atu(-t)
8. Find inverse Laplace for the following signals.
9. G(S) = 1/(18s3 + 90s2 + 108s)
10. G(S) = 1/(s2 + 3s + 2)