KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE: WARANGAL-15

Assignment – II

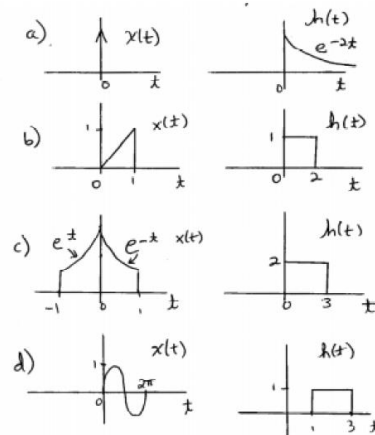| Class	:	II/IV B.Tech II-Semester
Subject	:	EC 225 - Signals & Systems (Common for ECE, EIE and EEE)
Assignment to be submitted on : 19.1.2015		

Continuous Time Convolution

Problem 1
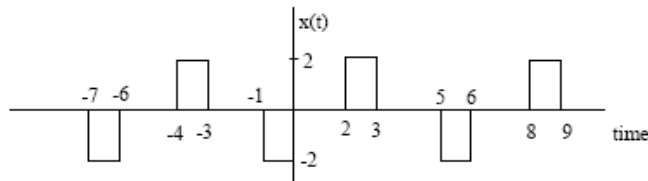Solve the following for y(t)=x(t)*h(t) where x(t) = u(t)-u(t-4); h(t) = r(t)
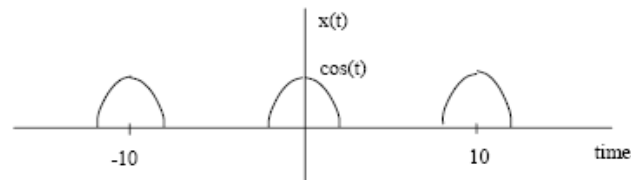
Problem 2
Convolve the following

Fourier Series

1. For the following signal:

a) Find the Fourier series
b) Plot the spectra versus frequency, $\omega = n\omega_0$.

2. Repeat problem 1 for the following signal:

3. Compute the Fourier series for the following signals:

a) $x(t) = 2 + 4\cos(50t + \pi/2) + 12\cos(100t - \pi/3)$
b) $x(t) = 4\cos(2\pi(1000)t)\cos(2\pi750000t)$
c)