

EE322 Fall 08 Homework Problem Set 38 (PS38)

Be sure to show your work.

1. Text, Problem 12-42. You don't need to plot the signals in the time domain, just the magnitude and phase of the Fourier transform at the specified points in the system. Note that f_m is the max frequency contained in the input message signal, obtained from the Fourier transform of $x_t(t)$.
2. Text, Problem 12-43. Recall that $\cos A \cos B = \frac{1}{2} \cos(A+B) + \frac{1}{2} \cos(A-B)$.