

EE322 Fall 08 Homework Problem Set 27 (PS27)

Be sure to show your work.

1. Text, Problem 10-3b.
2. Text, Problem 10-20b.

Review from Fourier series lectures:

3. Find the Fourier series Harmonic function for $2\cos(2\pi 20t) + \cos(2\pi 30t)$. Hint: find the fundamental frequency first.
4. Given that a signal has a Fourier series Harmonic function $X[k]$ with magnitude and phase shown below, what is the time signal $x(t)$? Assume a fundamental frequency of $f_F = 100$ Hz.

