

ECE 312 HW #3

Due by noon, Monday July 16th.

1. (4 points) Problem 6-39 (page 282 of textbook)
2. (3 points) Let $x(t) = \cos(10\pi t)$. Find the CTFS coefficients for $k = 0, \pm 1, \pm 2$.

(EXTRA CREDIT OF 2 POINTS IF YOU PLOT $x(t)$ and $x_F(t)$.)

3. (2 points) Suppose 5 samples (beginning at $t=0$) are taken over one period of the function in the previous problem. Find the DFT coefficients.
4. (1 point) Repeat (3) except give the DTFS coefficients.