

Homework 9
EE 313 Signals and Systems (Fall 2024)
Friday, November 15, 2024

- 1) 5.29 c) & d) use a time range of $-20 < t < 20$ s for plots. d) Write out interpolation formula to be implemented. For comparison, plot both $y(t)$ from part a) (solid line) as well that from interpolation formula (dashed line).
 - 2) 5.32
 - 3) 5.35
 - 4) 5.40abcd
 - 5) 5.43abc Plot both $x[n]$ & $y[n]$. In addition, plot the magnitude and phase (degrees) of X_k , H_k , and Y_k . Hint: remember H_k corresponds to $H(\Omega)$ for $0 \leq \Omega < 2\pi$, i.e., $H_k = H(\Omega_k = 2\pi k/N)$.
- For problems using MATLAB, include both m-file(s) (put your name in a comment line) as well as output figures (put your name in title) for each problem and/or problem section.

Due Thursday, November 21, 2024 by noon
at my office or department mail box.