Matlab Practice 08
Fourier Analysis for Discrete Signals

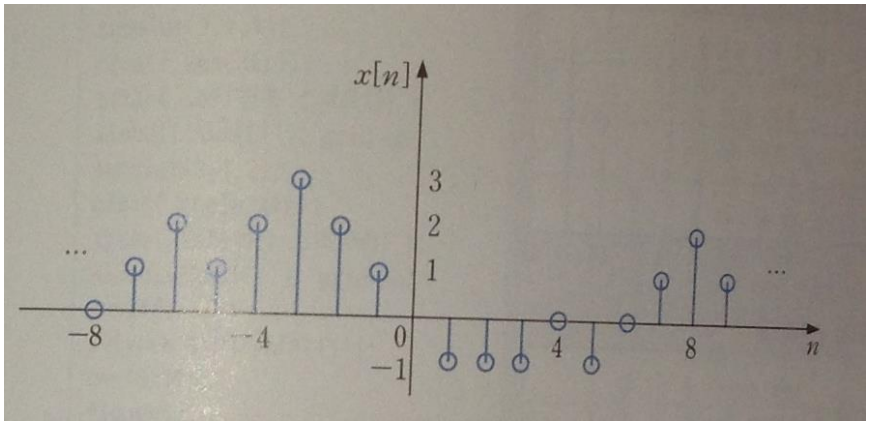
Sangkeun Lee

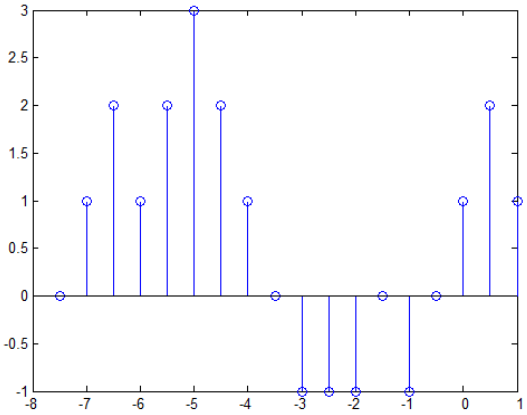
2016. 11. 16

Fourier Analysis for Discrete Signals

Matlab Practice 8-1

For a given discrete signal x[n] with period N=18,



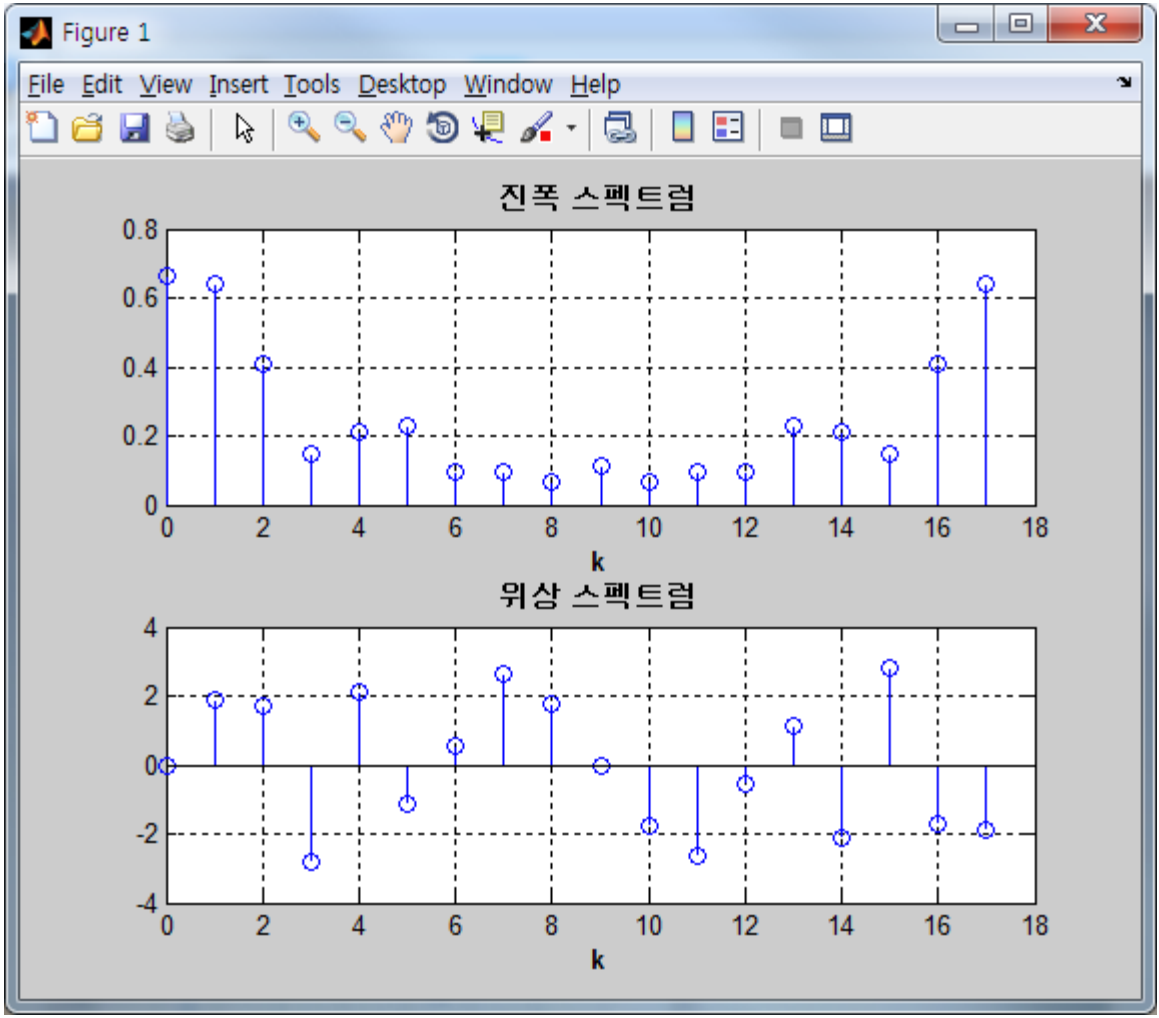


(a) Calculate the coefficients of DTFS and then plot them.
Hint: Amplitude and Phase Spectrum

(b) Plot DTFT and its Inverse DTFT when a non-periodic signal y[n] is produced by a single period of the signal x[n].

Display the results about poles and zeros

- **Coefficients are symmetric against Ω=π (k=N/2=9, in Matlab 10)**



(b)Display the results of Frequency response