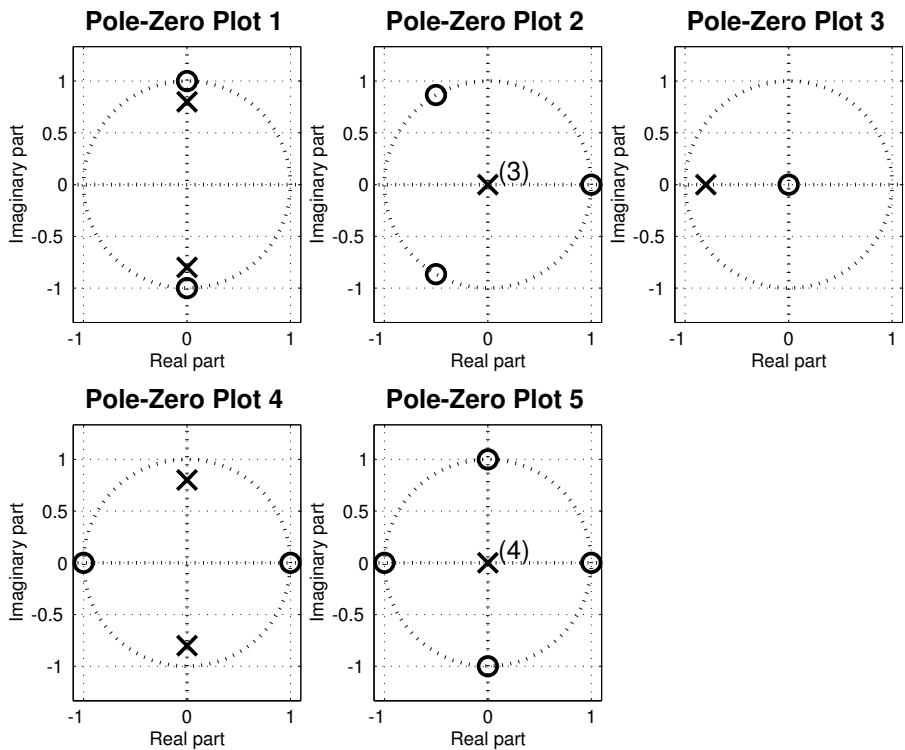
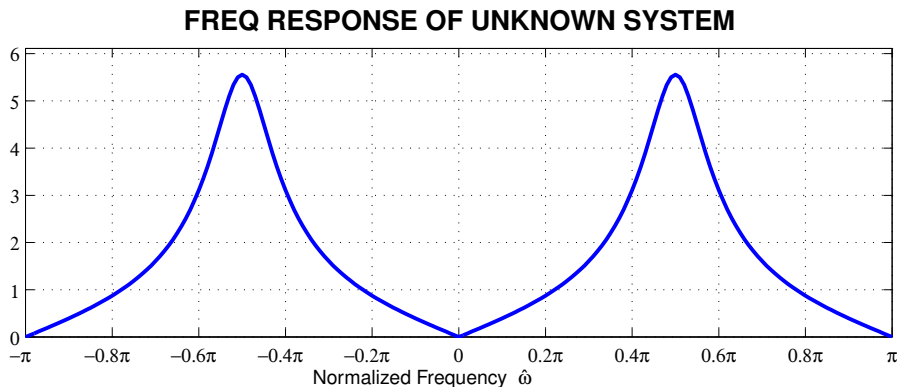


PROBLEM:



- (a) Which of the above pole-zero plots represents the system whose frequency response is given in the following graph?



- (b) Now assume that each of the systems represented by the above pole-zero plots has impulse response $h_k[n]$, where k is the index shown in the title of the pole-zero plot.

(i) Which of the systems are FIR systems?

(ii) In the table below, indicate with an X each of the systems for which $h_k[n] * e^{j\pi n} = 0$, where $*$ denotes convolution.

System #	1	2	3	4	5
$h_k[n] * e^{j\pi n} = 0??$					