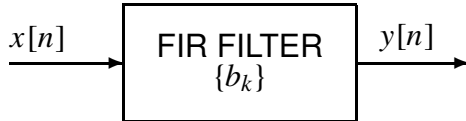
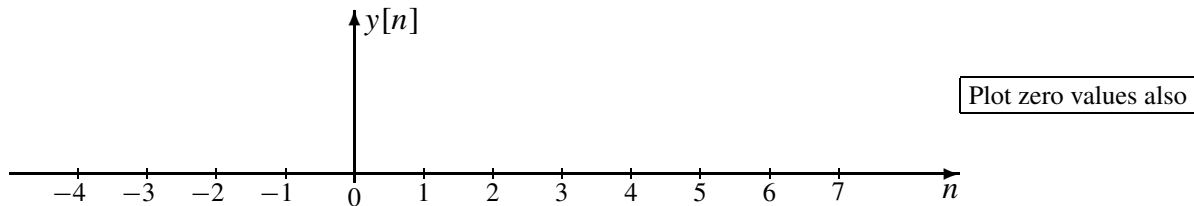


PROBLEM:

- (a) If the impulse response of an FIR filter is $h[n] = \delta[n] - 4\delta[n - 1] + \delta[n - 2]$, make a plot of the output when the input is the signal: $x[n] = \delta[n - 2] - \delta[n - 4]$



- (b) Determine the frequency response, $\mathcal{H}(\hat{\omega})$, and give the answer as a simple formula:
- (c) Determine the magnitude of $\mathcal{H}(\hat{\omega})$ and present your answer as a plot of the magnitude vs. frequency. Label important features.

