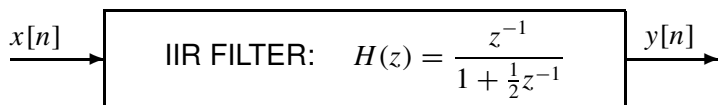
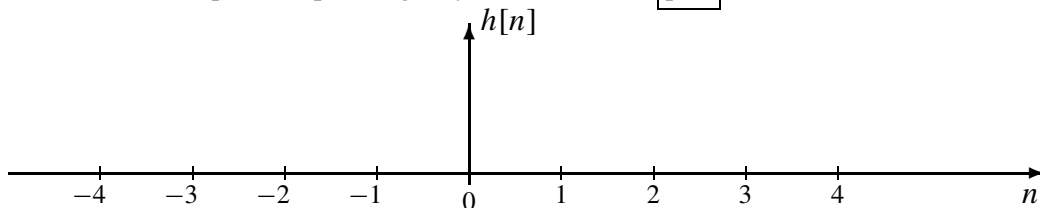


PROBLEM:

The following IIR filter is specified by its system function:

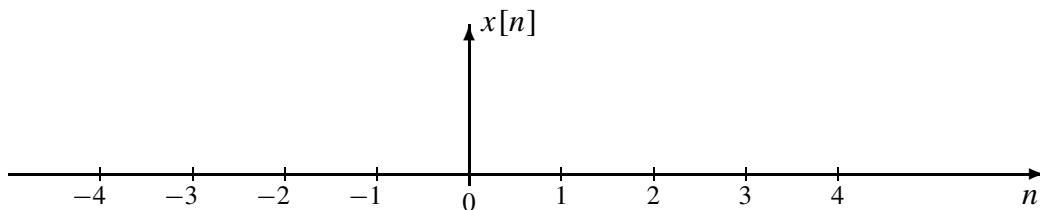


- (a) Determine the impulse response: give your answer as a plot of $h[n]$ vs. n .



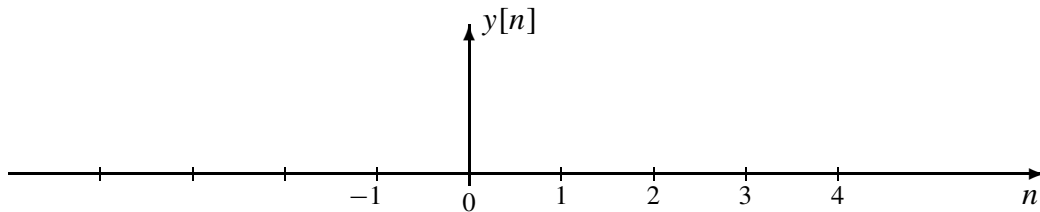
Plot zero values also

- (b) Make a plot of the signal: $x[n] = \delta[n] - \frac{1}{4}\delta[n - 2]$.



Plot zero values also

- (c) Use the z -transform method to determine a simple formula for the output when the input is $x[n] = \delta[n] - \frac{1}{4}\delta[n - 2]$. Make a plot of $y[n]$ versus n for the range $-1 \leq n \leq 5$.



Plot zero values also