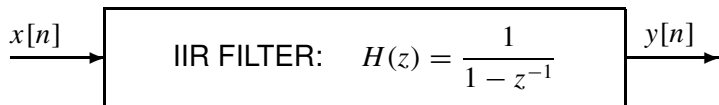
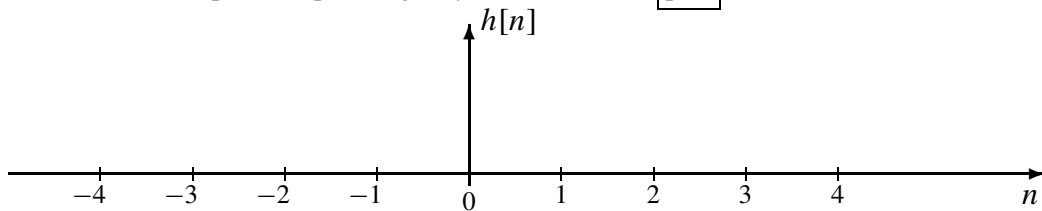


PROBLEM:

The following IIR filter is specified by its system function:

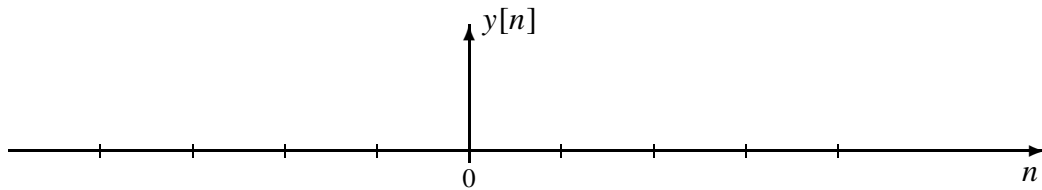


- (a) Determine the impulse response: give your answer as a plot of $h[n]$ vs. n .



Plot zero values also

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



Plot zero values also