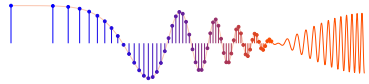

PROBLEM:

A linear time-invariant system is described by the difference equation

$$y[n] = \sum_{k=0}^{5} x[n-k]$$

The input to this system is *unit step* signal, denoted by $u[n]$:

$$x[n] = u[n] = \begin{cases} 0 & n < 0 \\ 1 & n \geq 0 \end{cases}$$

Compute $y[n]$, over the range $-5 \leq n \leq \infty$. Make a plot of $y[n]$ vs. n.

McClellan, Schafer and Yoder, *Signal Processing First*, ISBN 0-13-065562-7.
Prentice Hall, Upper Saddle River, NJ 07458.