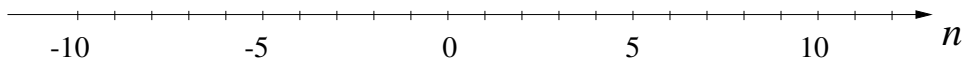


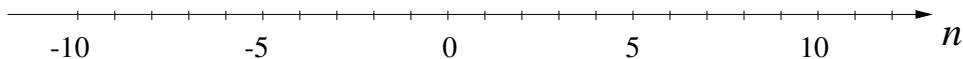
PROBLEM:

$$\text{Let } x[n] = 2u[n] - 2u[n - 6] \text{ and } h[n] = \begin{cases} \frac{1}{2}(2)^n & 0 \leq n \leq 3 \\ 0 & \text{otherwise.} \end{cases}$$

(a) Plot $x[n]$.



Plot $h[n]$.



Label the amplitudes for each sample.

(b) If we now assume $x[n] = \delta[n] + \delta[n - 1] + \delta[n - 2]$ and $y[n] = x[n] * h[n]$, where $h[n]$ is as defined above, plot $y[n]$ on the axis below.

