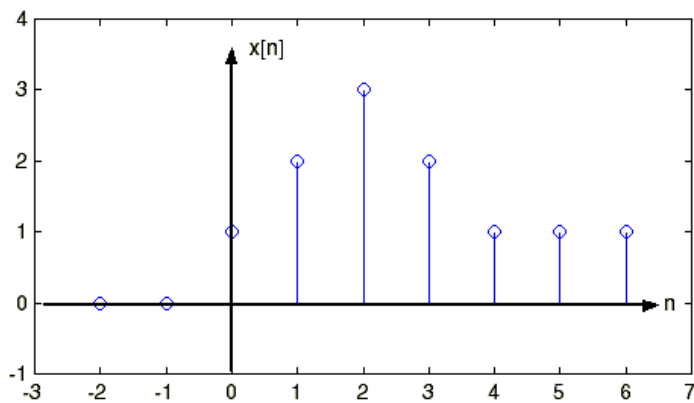


Opg 5.2

$$y[n] = 2x[n] - 3x[n-1] + 2x[n-2]$$

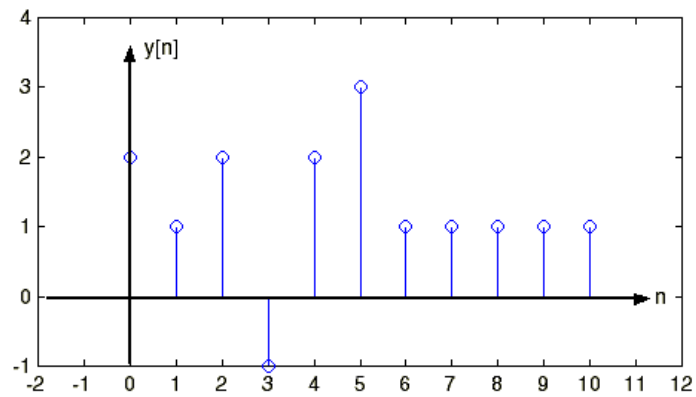
a)

$$y[n] = \begin{cases} 0 & n < 0 \\ n+1 & n = 0,1,2 \\ 5-n & n = 3,4 \\ 1 & n \geq 5 \end{cases}$$



n	0	1	2	3	4	5	6	7	8	9	10
2x[n]	2	4	6	4	2	2	2	2	2	2	2
-3x[n-1]	0	-3	-6	-9	-6	-3	-3	-3	-3	-3	-3
2x[n-2]	0	0	2	4	6	4	2	2	2	2	2
y[n]	2	1	2	-1	2	3	1	1	1	1	1

b)



c)
$$h[n] = 2\delta[n] - 3\delta[n-1] + 2\delta[n-2]$$

