

EXERCISE 5.2: Compute the output $y[n]$ for the length-4 filter whose coefficients are $\{b_k\} = \{3, -1, 2, 1\}$. Use the input signal given in Fig. 5-2(a). Verify that the partial answer tabulated here is correct, then fill in the missing values.

n	$n < 0$	0	1	2	3	4	5	6	7	8	$n > 8$
$x[n]$	0	2	4	6	4	2	0	0	0	0	0
$y[n]$	0	6	10	18	?	?	?	8	2	0	0

