(e) $y[n + 2] + 1/2y[n] = 2x[n + 2] - x[n]$

2.7. For the discrete-time signals $x[n]$ and $v[n]$ shown in Figure P2.7, do the following:

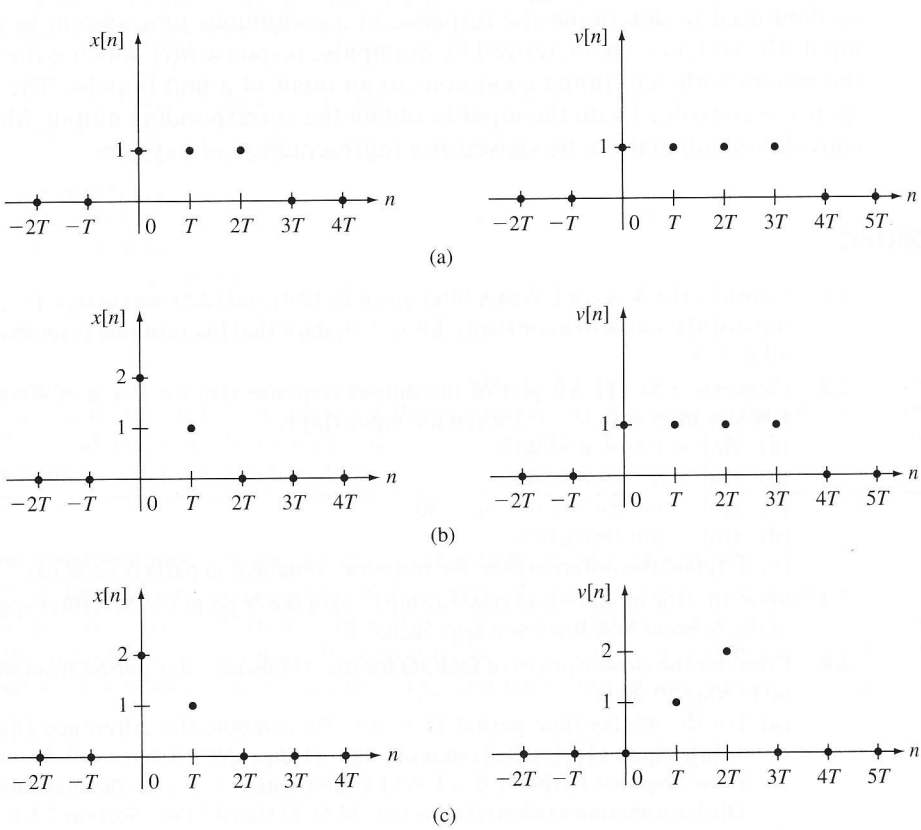

FIGURE P2.7

(a) Compute the convolution $x[n] * v[n]$ for all $n \geq 0$. Sketch the results.

(b) Repeat part (a), using the M-file `conv`.

2.8. For the discrete-time signals $x[n]$ and $v[n]$ given in each of the following parts, compute