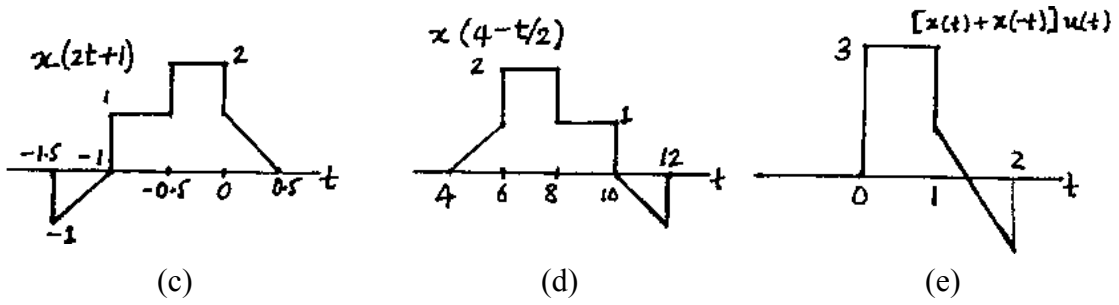
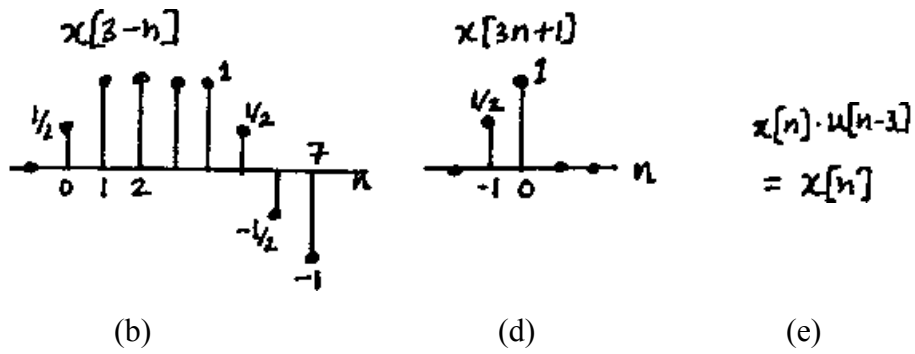


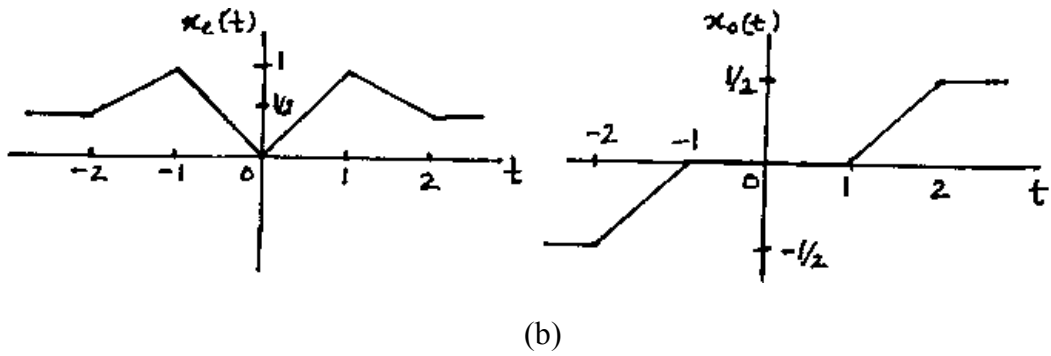
21.



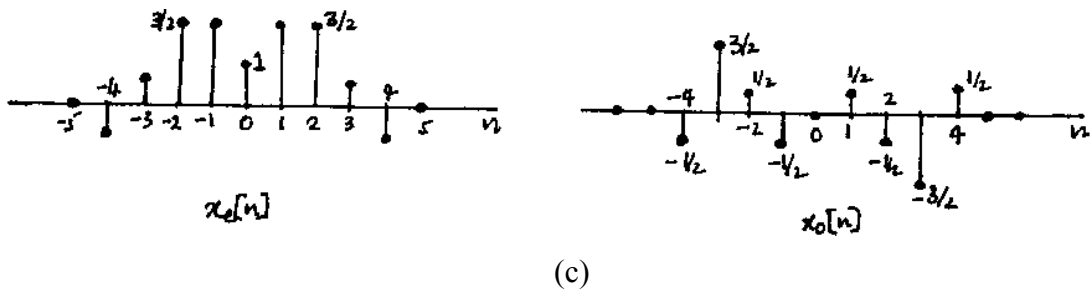
22.



23.



24.



25.

(a). Periodic, period = $2\pi / 4 = \pi / 2$

(c) $x(t) = \frac{1}{2}[1 + \cos(4t - 2\pi / 3)]$. Periodic, period = $2\pi / 4 = \pi / 2$

(e) $x(t) = \frac{1}{2}[\sin(4\pi t)u(t) - \sin(4\pi t)u(-t)]$. Not periodic.