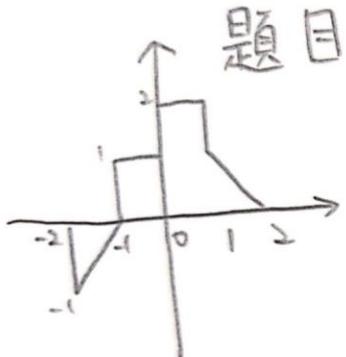
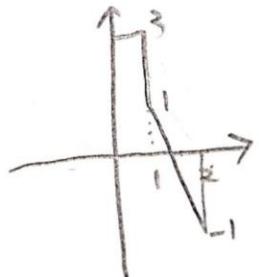


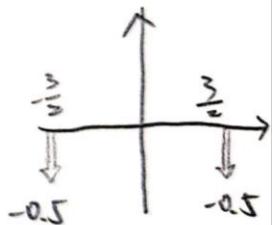
1.21(c), (d)



(e) $[x(t) + x(-t)] u(t)$



(d) $x(t) [\delta(t + \frac{3}{2}) - \delta(t - \frac{3}{2})]$



1.26(c)

periodic, period=8.

(c)

$$\frac{\frac{2\pi}{1}}{\frac{1}{8}\pi} = 16$$

$$\begin{aligned} \cos\left(\frac{\pi}{8}n^2\right) &= \cos\left(\frac{\pi}{8}(n+N)^2\right) \\ &= \cos\left(\frac{\pi}{8}(n^2 + 2nN + N^2)\right) \end{aligned}$$

$2nN + N^2$ 為 16 的倍數

$$\left\{ \begin{array}{l} n=0 \Rightarrow N^2 \text{ 為 16 的倍數} \\ n=1 \Rightarrow 2N + N^2 \text{ 為 16 的倍數} \end{array} \right.$$

$\Rightarrow 2N$ 為 16 的倍數

$\Rightarrow N$ 的最小值為 8