REVIEW EXERCISE

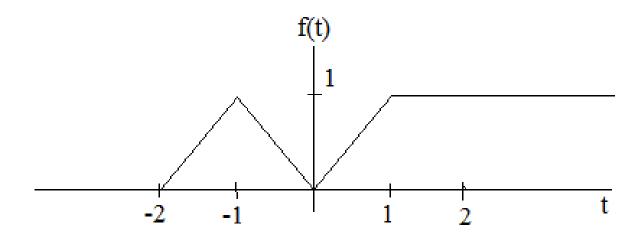
Problem-1

Draw the signal below and determine whether it is periodic or not? If the signal is periodic, what is the fundamental period?

$$x[n] = \sum_{k=-\infty}^{\infty} \{\delta[n-4k] - \delta[n-1-4k]\}$$

Problem-2

Determine and sketch the even and odd parts of the signal depicted in figure below



Problem-3

 \triangleright Determine the values of P_{∞} and E_{∞} for each of the following signals:

a)
$$x_1(t) = e^{-2t}u(t)$$

b)
$$x_2(t) = e^{j(2t+\pi/4)}$$

c)
$$x_1[n] = (\frac{1}{2})^n u[n]$$