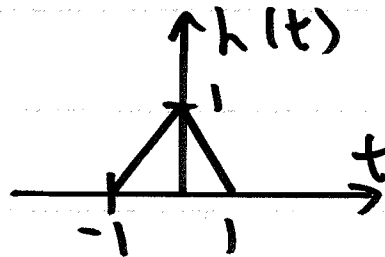


Prob. 2.23 See Fig. P 2.23 on pg 143

$$y(t) = x(t) * h(t)$$

$$\text{where: } x(t) = \sum_{k=-\infty}^{\infty} \delta(t - kT)$$

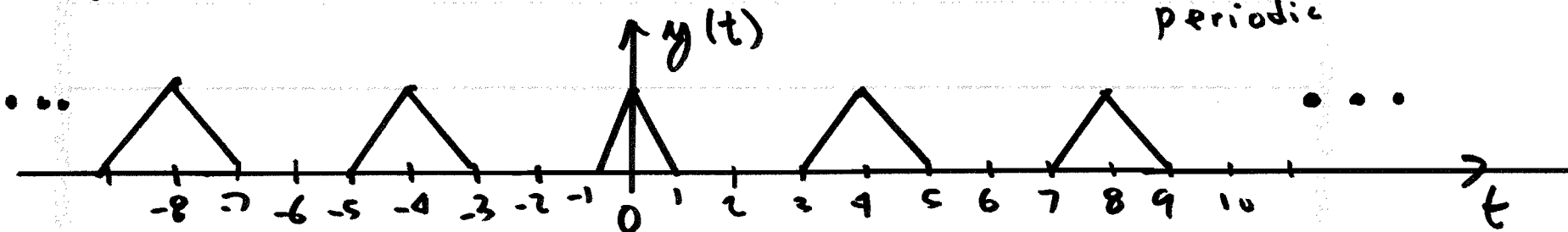


$$y(t) = \left\{ \sum_{k=-\infty}^{\infty} \delta(t - kT) \right\} * h(t)$$

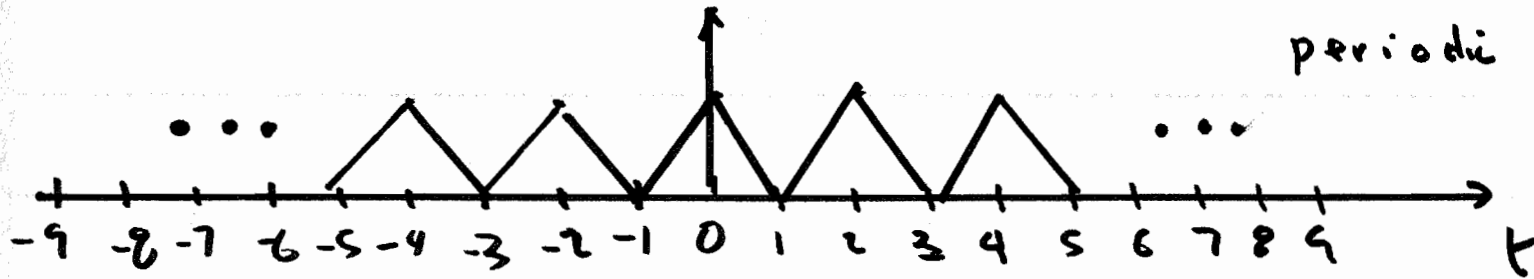
$$\text{dist: } = \sum_{k=-\infty}^{\infty} \left\{ \delta(t - kT) * h(t) \right\} = \sum_{k=-\infty}^{\infty} h(t - kT)$$

PROP. (a) (b) (c) (d)
Plot for $T=4$, $T=2$, $T=1.5$, $T=1$

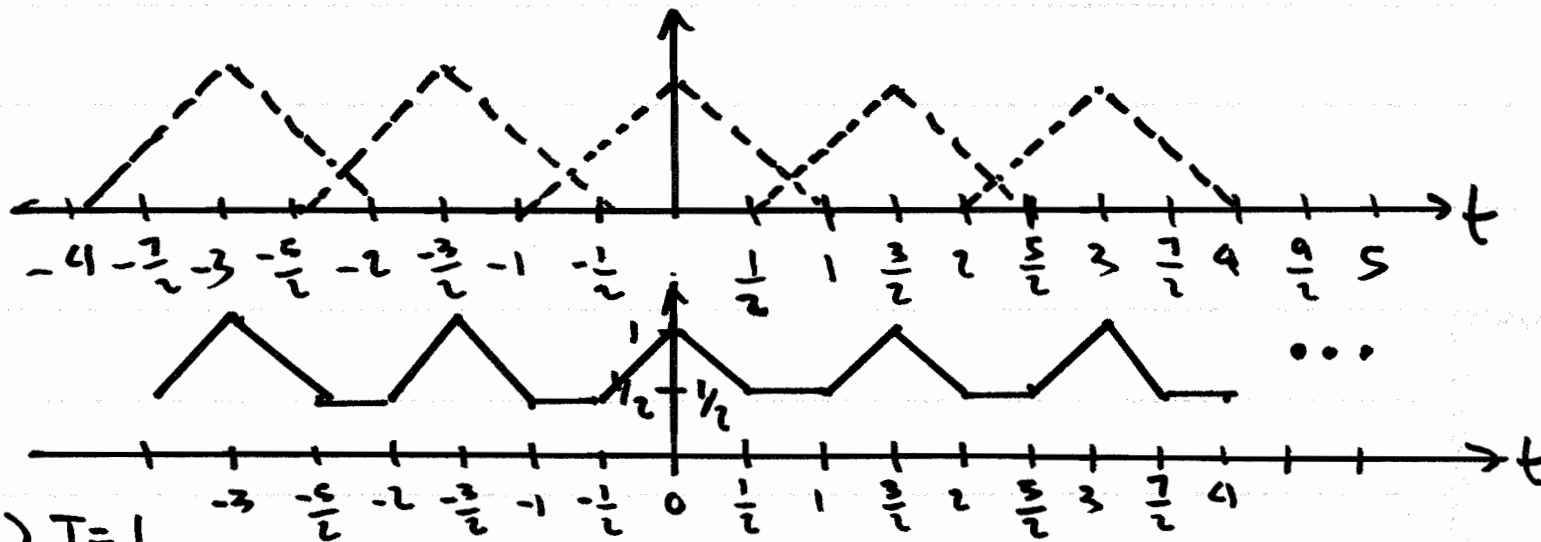
(a) $T=4$ triangles do not overlap



(b) $T=2$ triangles just touch each other



(c) $T=3/2$ triangles partially overlap



(d) $T=1$

fully
overlap

