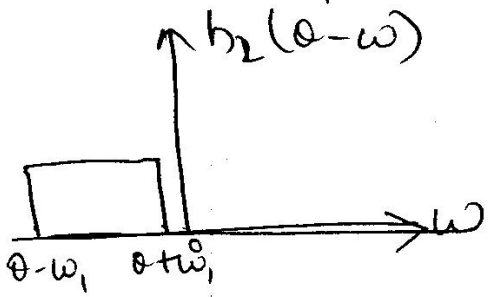
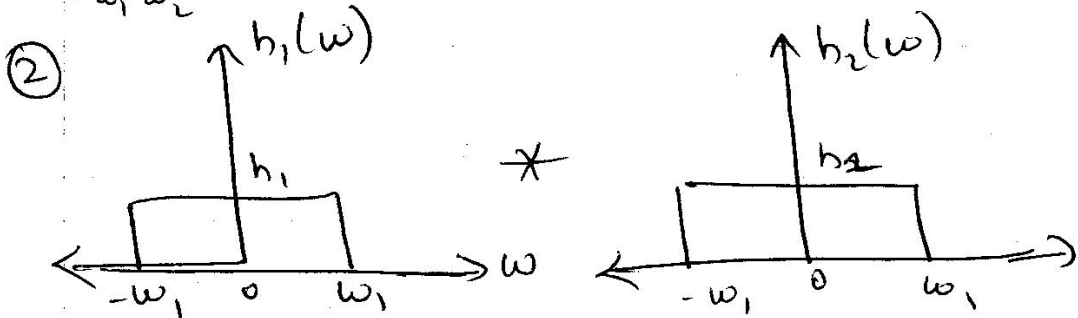
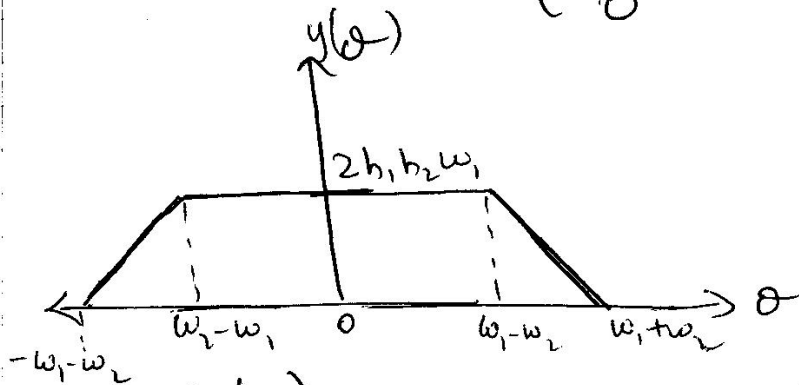


(V)  $t > \omega_1 + \omega_2, y(\omega) = 0.$

∴  $y(\omega) = \begin{cases} 0, & \theta < -\omega_1 - \omega_2 \\ h_1 h_2 [\theta + \omega_1 + \omega_2], & -\omega_1 - \omega_2 < \theta < \omega_2 - \omega_1 \\ h_1 h_2 \cdot 2\omega_1, & \omega_2 - \omega_1 < \theta < \omega_1 - \omega_2 \\ h_1 h_2 [\omega_1 + \omega_2 - \theta], & \omega_1 - \omega_2 < \theta < \omega_1 + \omega_2 \\ 0, & \theta > \omega_1 + \omega_2 \end{cases}$



(I)  $\theta < -2\omega_1, y(\omega) = 0.$

(II)  $\theta > -2\omega_1$  &  $\theta < 0$   
 $y(\omega) = \int_{-\omega_1}^{\theta + \omega_1} h_1 h_2 d\tau = h_1^2 [\theta + 2\omega_1]$

(III)  $\theta > 0$  &  $\theta < 2\omega_1$   
 $y(\omega) = \int_{\theta - \omega_1}^{\omega_1} h_1^2 d\tau = h_1^2 [2\omega_1 - \theta]$