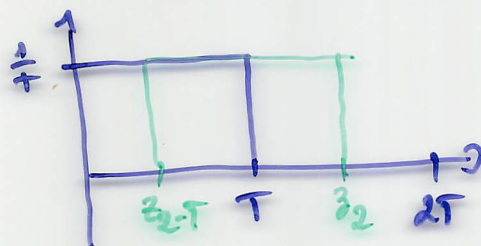


$T \leq z_2 \leq 2T$  :  $\delta_{z2}(z_2) = \int_{z_2-T}^T \underbrace{\delta_{x1}(z_2-z)}_{\frac{1}{T}} \cdot \underbrace{\delta_{x2}(z)}_{\frac{1}{T}} \cdot dz$

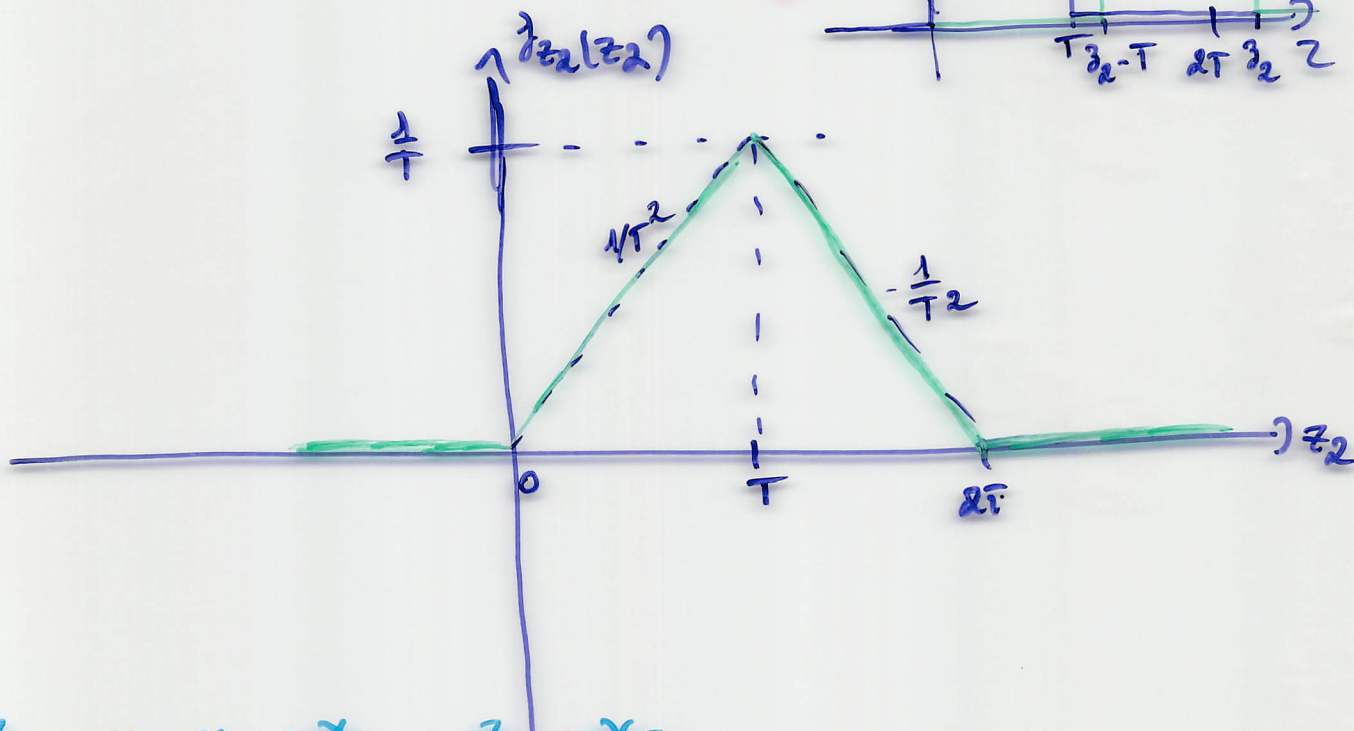
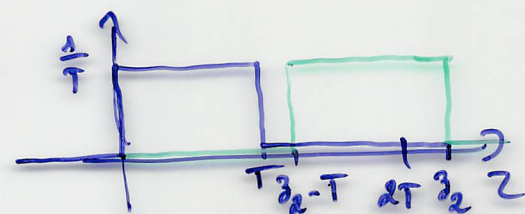


$= \frac{1}{T^2} [T - (z_2 - T)]$

$\delta_{z2}(z_2) = \frac{2T - z_2}{T^2}$

$z_2 > 2T$  :

$\delta_{z2}(z_2) \equiv 0$



$z_3 = x_1 + x_2 + x_3 = z_2 + x_3$  ;

$\delta_{z3}(z_3) = \delta_{x1}(z_3) * \delta_{x2}(z_3) * \delta_{x3}(z_3)$

$= \delta_{z2}(z_3) * \delta_{x3}(z_3)$

$= \int_{-\infty}^{+\infty} \delta_{z2}(z) \cdot \delta_{x3}(z_3 - z) dz$