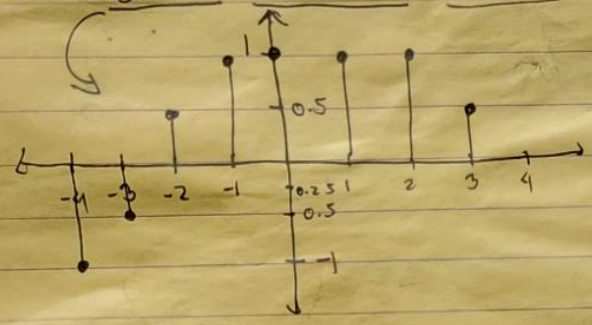
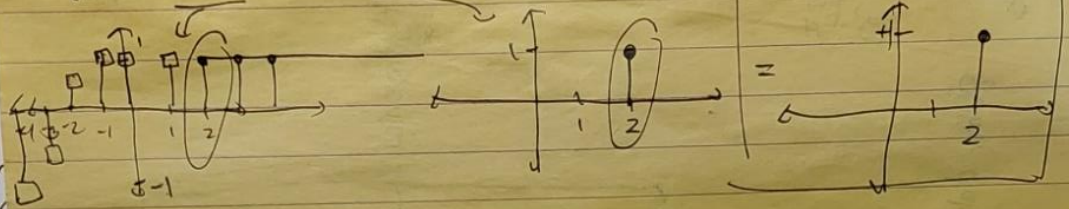
impulse

$x(n) = -\delta(n+4) - 0.5\delta(n+3) + 0.5\delta(n+2) + \delta(n+1) + \delta(n) + \delta(n-1) + \delta(n-2) + 0.5\delta(n-3)$



$y_0(n) = x(n-2)\delta(n-2)$



$y_7(n) = x(\frac{1}{2}n)$ time scaling, $\frac{1}{2} < 1$, expansion

$= [-4 \quad -3 \quad -2 \quad -1 \quad 0 \quad 1 \quad 2 \quad 3 \quad 4\ ][2]$

$= [-8 \quad -6 \quad -4 \quad -2 \quad 0 \quad 2 \quad 4 \quad 6 \quad 8\ ]$