

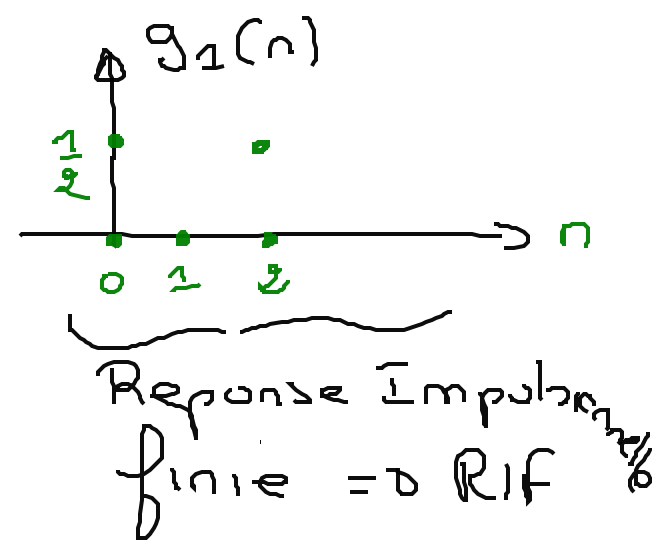
2^e Methode (RIF): on extrait de la relation de recurrence la reponse impulsionnelle

$$y(n] = g_1(n) * x(n)$$

$$= \frac{x(n)}{2} + \frac{x(n-2)}{2} = \frac{x(n)}{2} + \frac{x(n) * \delta(n-2)}{2}$$

$$= x(n) * \left(\frac{1 + \delta(n-2)}{2} \right)$$

$$g_1(n) = \frac{1 + \delta(n-2)}{2} \quad \Rightarrow$$



$$G_1(z) = Tz (g_1(n])$$

$$= \frac{1}{2} + \frac{z^{-2}}{2}$$