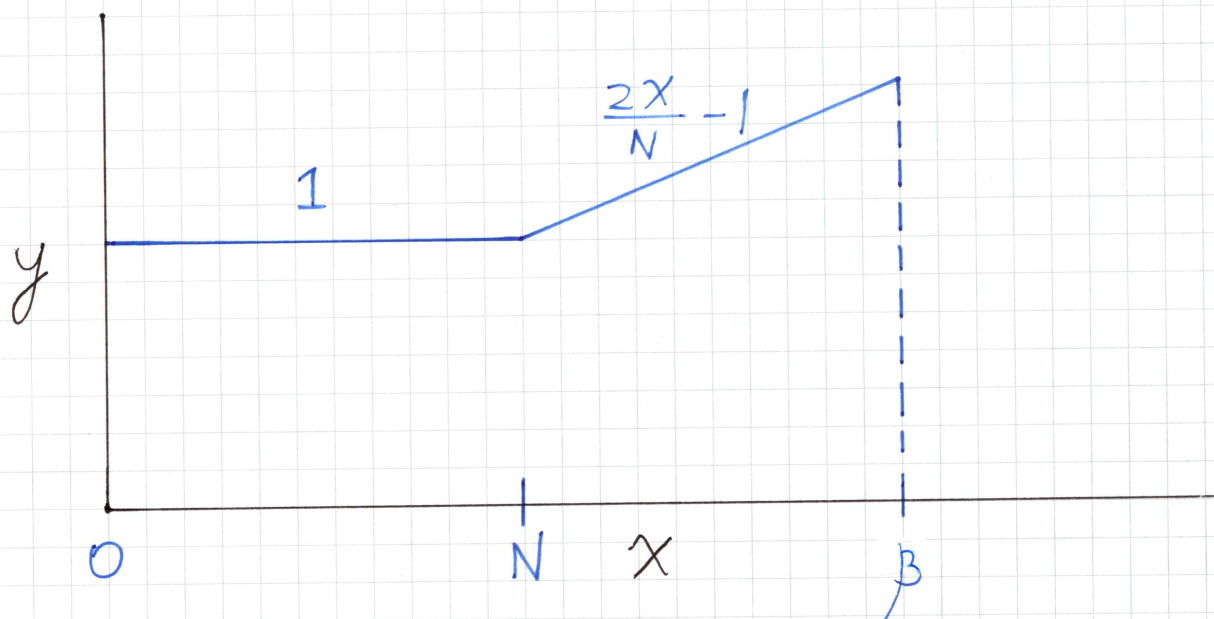


$$\text{core_freq_max} = X$$

$$\text{core_freq_base_max} = N$$

$$\text{core_area_multiplier} = y$$

$$\text{core_freq_absolute_max} = \beta$$



$$y = \begin{cases} 1 & 0 \leq x \leq N \\ \frac{2X}{N} - 1 & N \leq x \leq \beta \end{cases}$$

$$0 \leq f_1 \leq 1 \quad 0 \leq f_2 \leq 1 \quad 0 \leq f_3 \leq 1$$

$$X = 0f_1 + Nf_2 + \beta f_3$$

$$f_1 + f_2 + f_3 = 1$$

$$y = 1f_1 + 1f_2 + \left(\frac{2\beta}{N} - 1\right)f_3$$

$$f_1 \leq b_1 \quad f_2 \leq b_2 \quad f_3 \leq b_3$$

$$b_1 + b_2 + b_3 \leq 2$$

$$b_1 + b_3 \leq 1$$