

EECS 322

27/3/2018

Worst case received amplitude:

$$g[0] - \sum_{k \neq 0} |g[k]|$$



$$\text{SNR} = \frac{\text{signal level}}{\sigma_n}$$

Pulse response:  $g[n]$

Worst case ISI

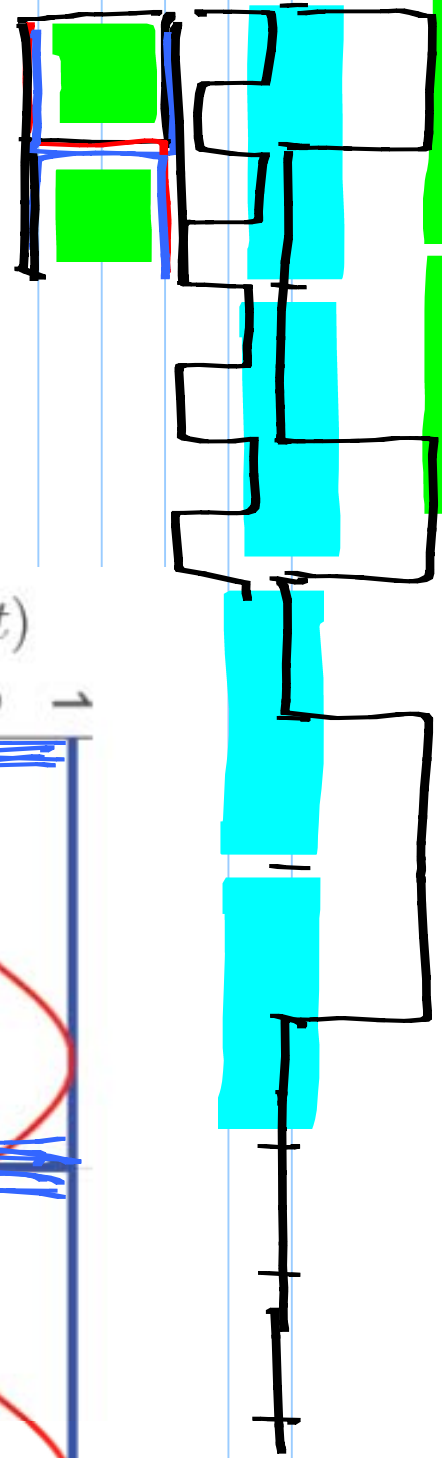
cursor:  $g[0]$

$$\sum_{k \neq 0} |g[k]|$$

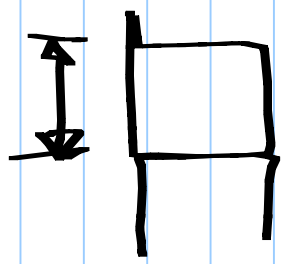
pre-cursor:  $g[k], k < 0$

post-cursor:  $g[k], k > 0$

$t=0$

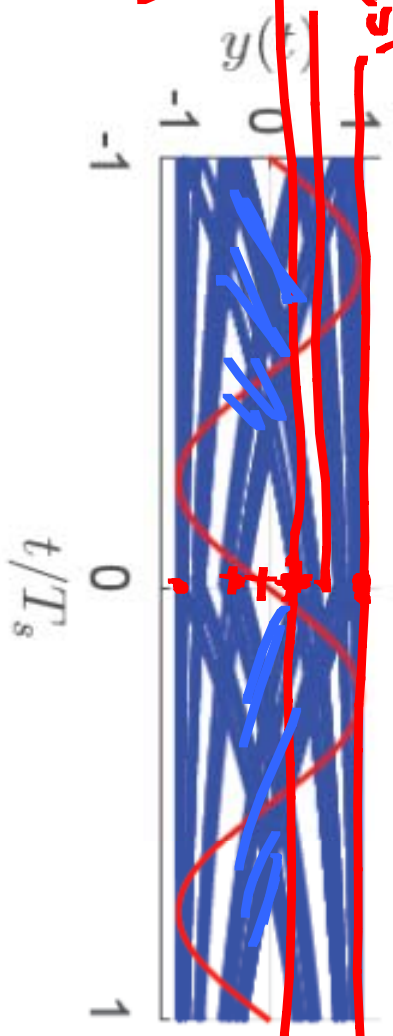
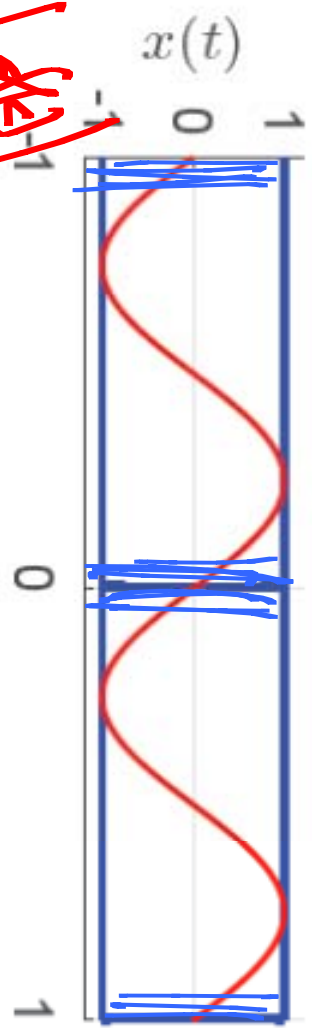


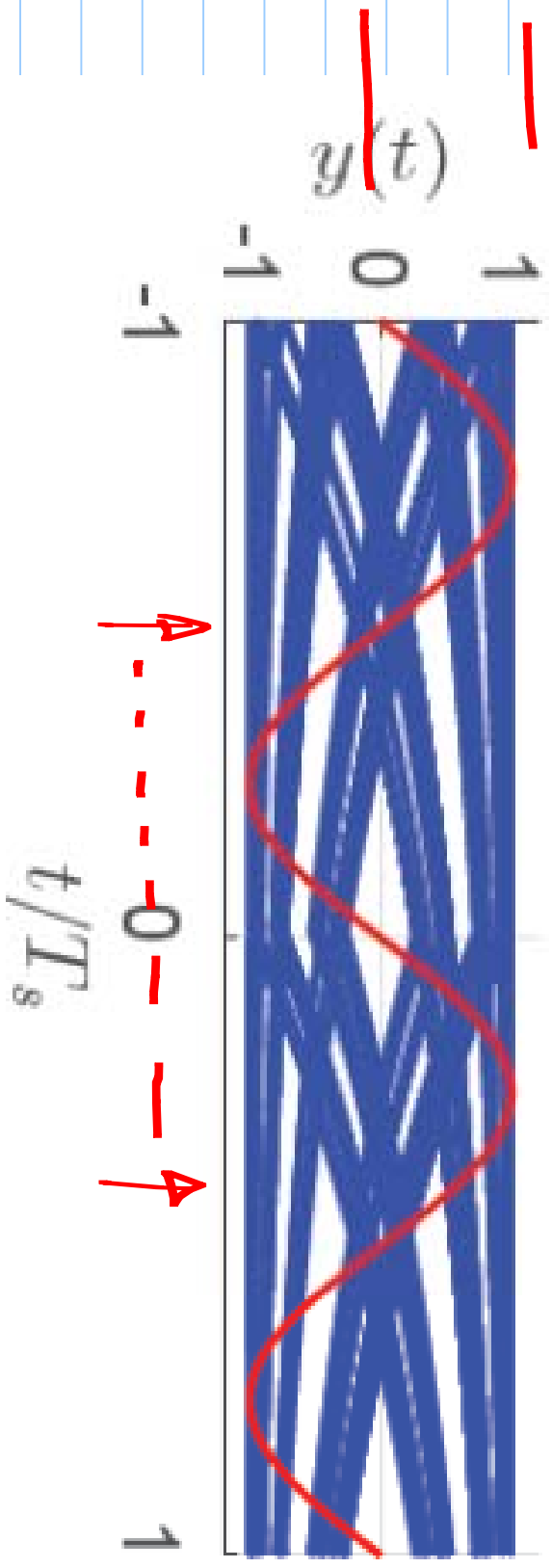
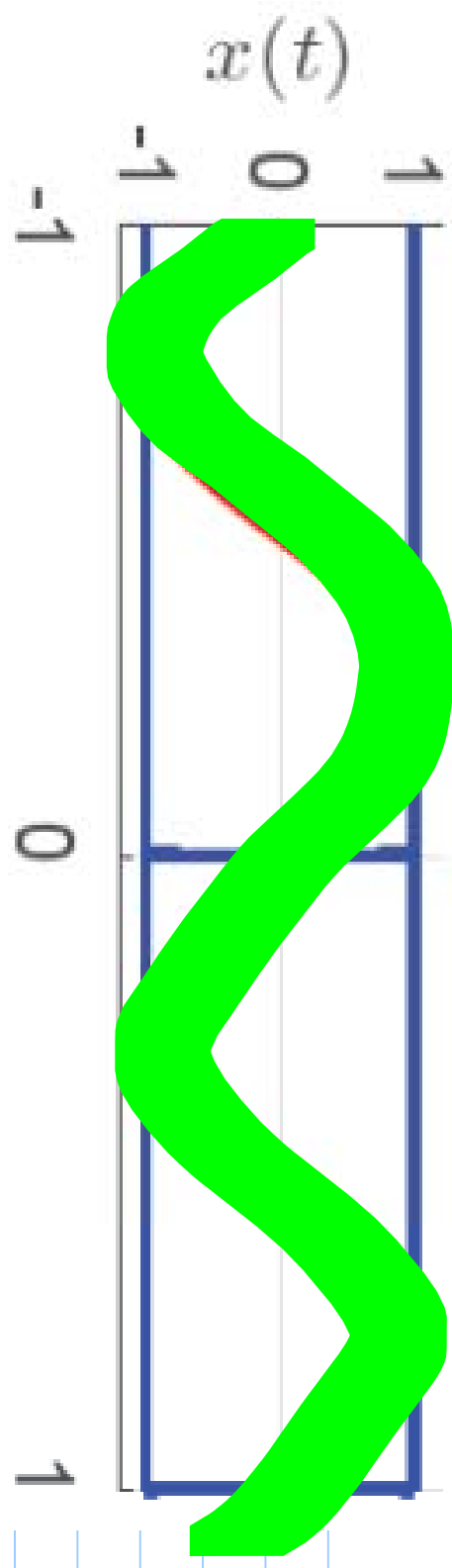
2 bit interval

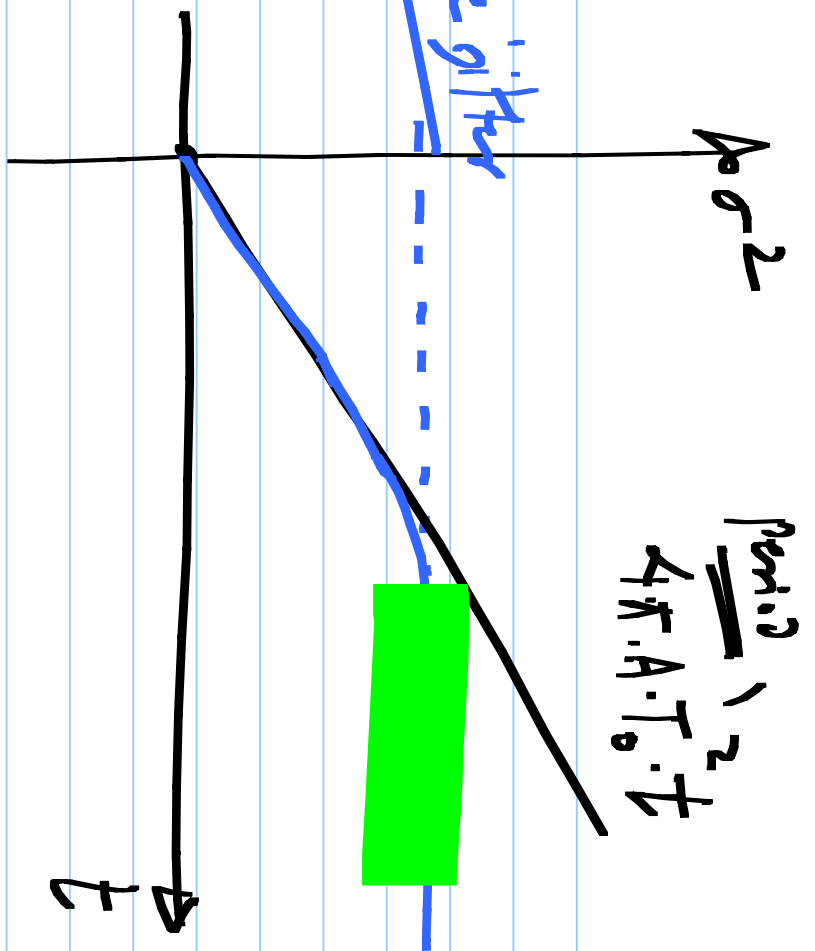
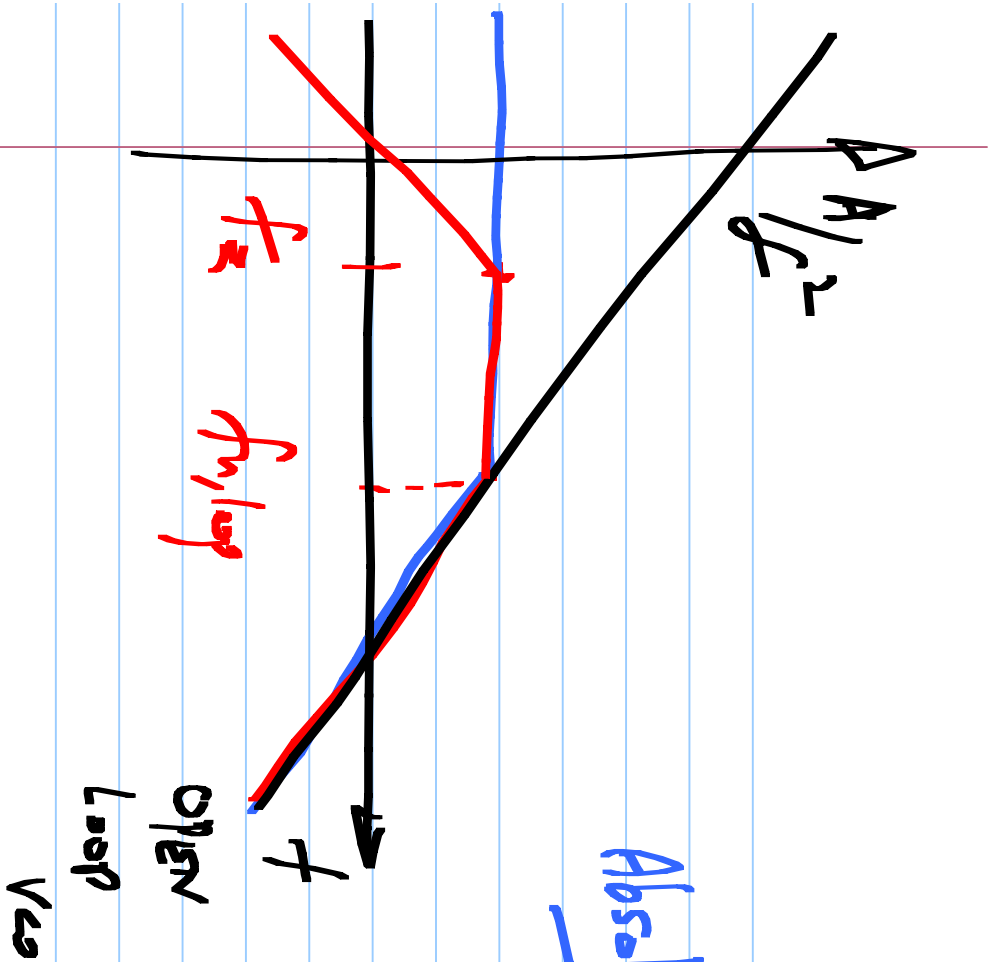


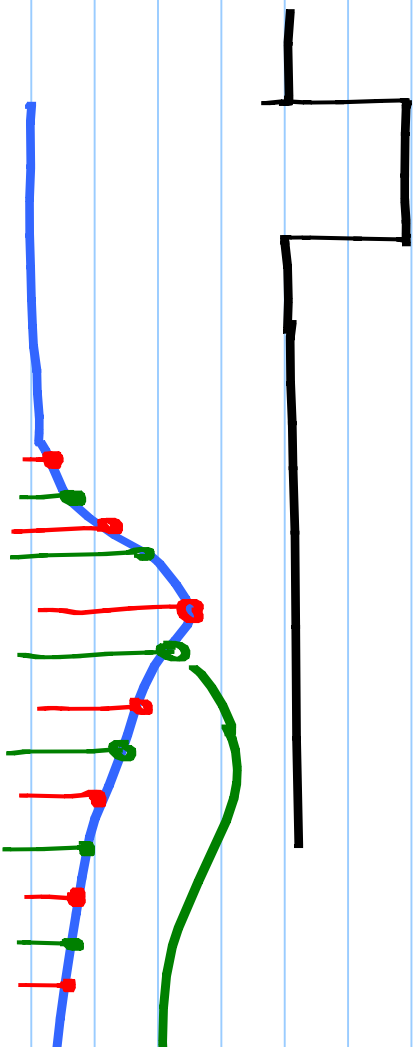
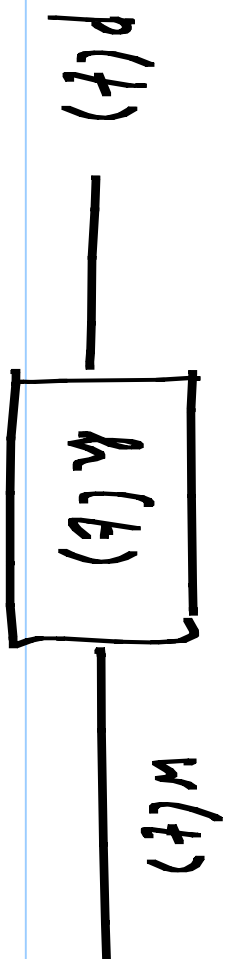
$$g[k] - \sum_{k \neq 0} g[k]$$

$$g[k] + \sum_{k \neq 0} g[k]$$







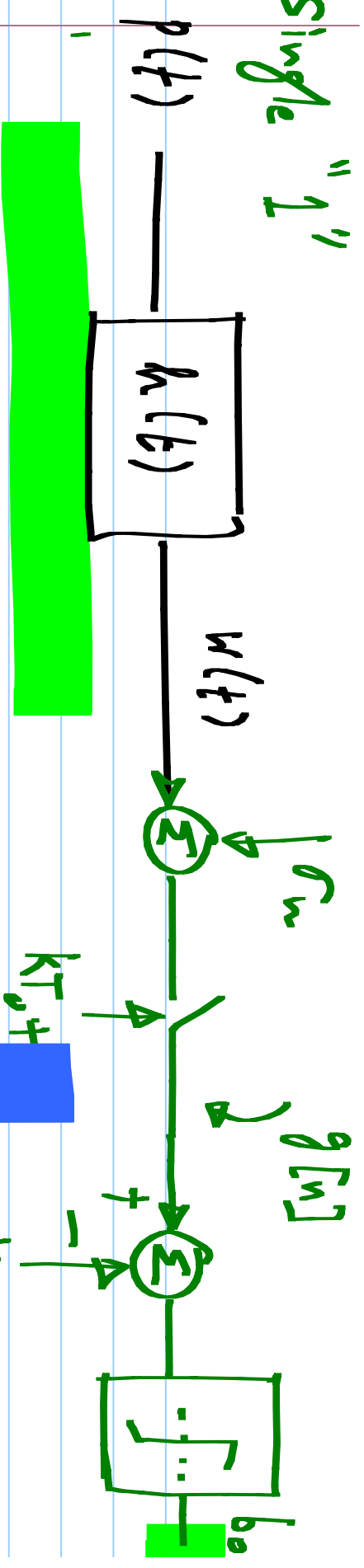


$g[n]$ :  $N+1$  non-zero values

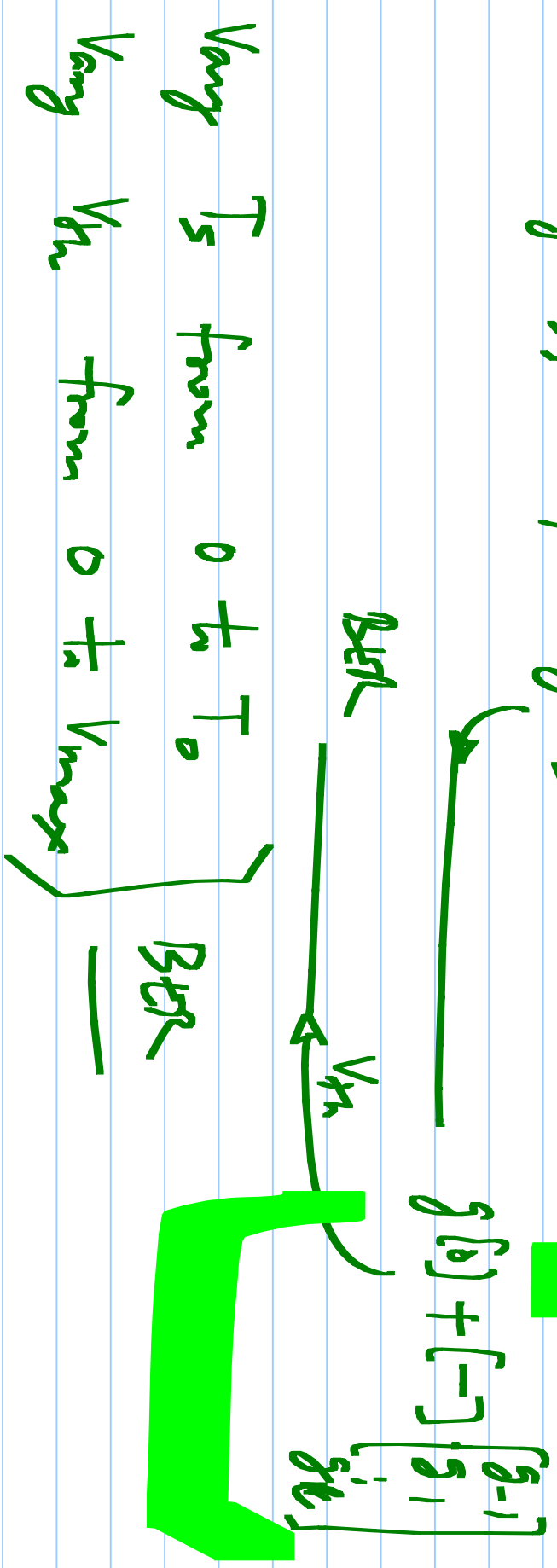
$h[n]$ :

Assume a certain  $\sigma_n$  & calculate average BER

Single "1"



For every  $T_s$ , compute  $g[n]$



$T_2$

