

Parametrii TTL:  $t_{\text{sat}}$

Hondol Paul

$V_i$  - input

$V_1$

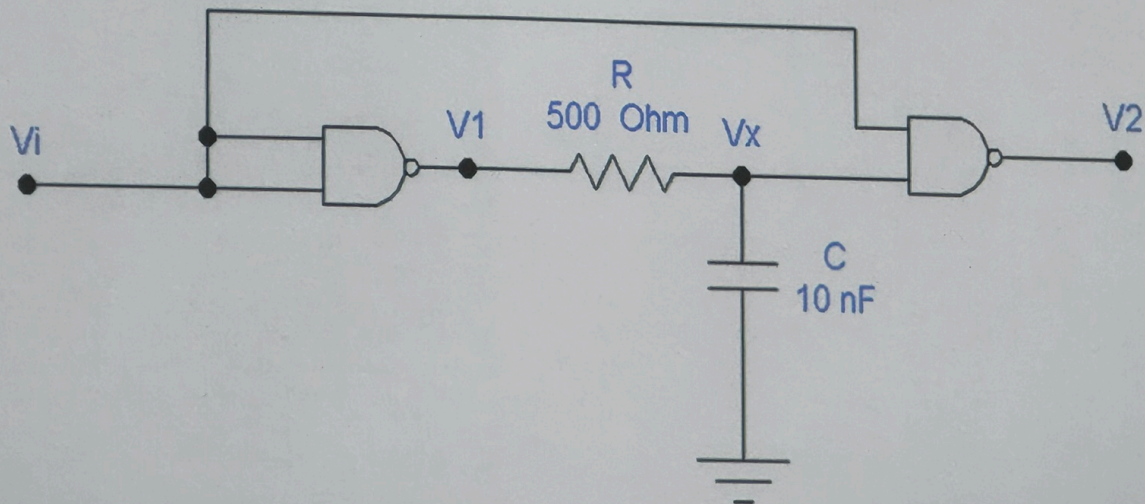
$V_x$

$V_2$

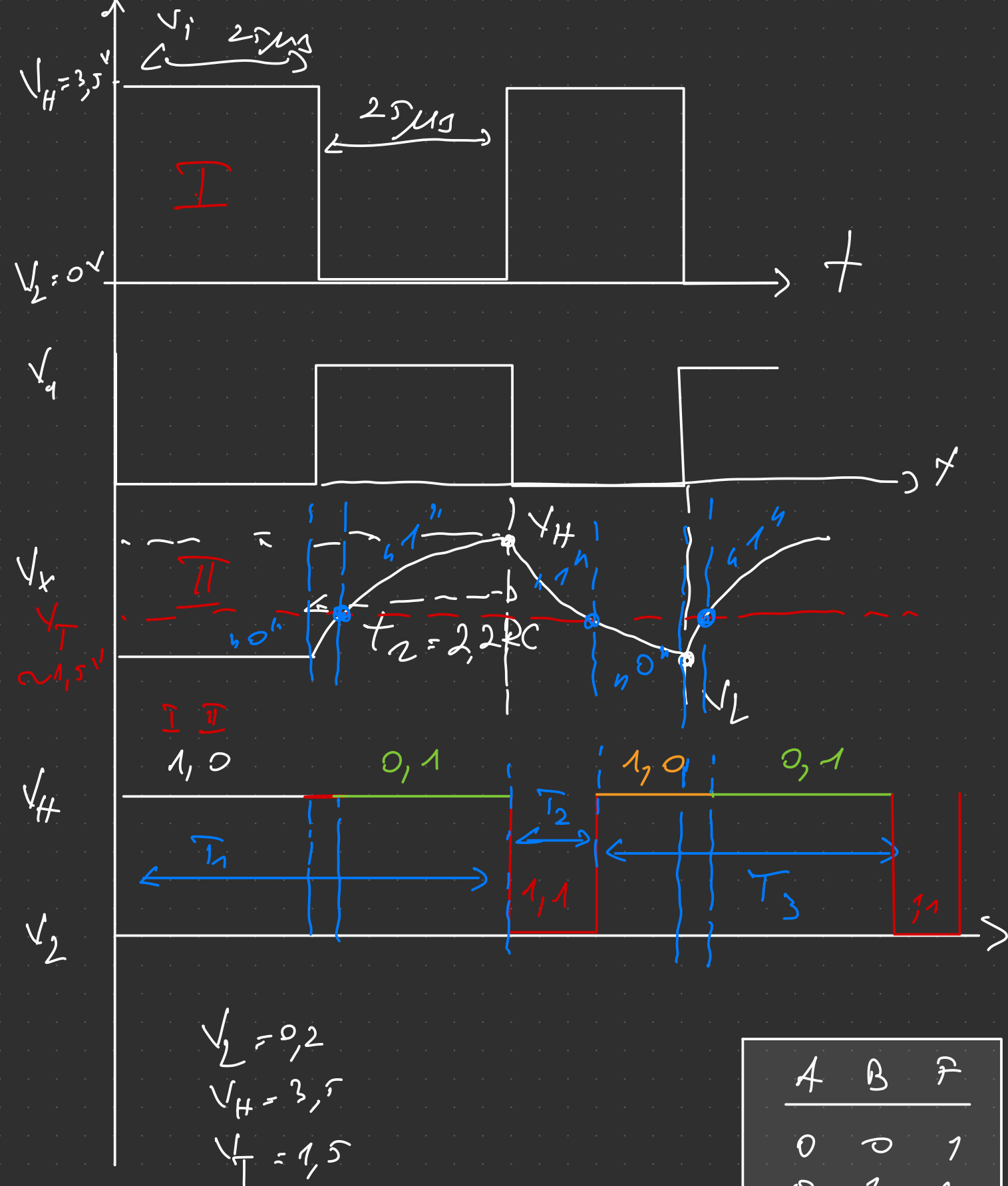
$t_2 = 25 \mu s$

Se cere să se ridice diagramele de timp în punctele:  $V_i$ ,  $V_1$ ,  $V_x$ ,  $V_2$ . În final se cere să se calculeze teoretic timpii de la ieșirea schemei.

Schema:



$RC \rightarrow$  Trece  $\hat{f}_{\text{os}}$   $R = 1 \text{ k}\Omega$   
 $C = 10 \text{ nF}$   
 $R \cdot C = 10 \mu s \left( 10^3 \cdot 10^{-8} \right)$



A	B	F
0	0	1
0	1	1
1	0	1
1	1	0

$$T_1 = 25 + 25 = 50 \mu s$$

$$T_2 = RC \ln \frac{V_L - V_H}{V_L - V_T} \sim 10 \mu s$$

$$T_3 = T_1 - T_2$$

$$RC \quad C_n \quad \frac{\text{vol. fun} + \text{vol. mit}}{\text{vol. fun.} - \text{vol threshold}}$$

$$f_{\text{inelo}} (v_H \text{ sau } v_2)$$