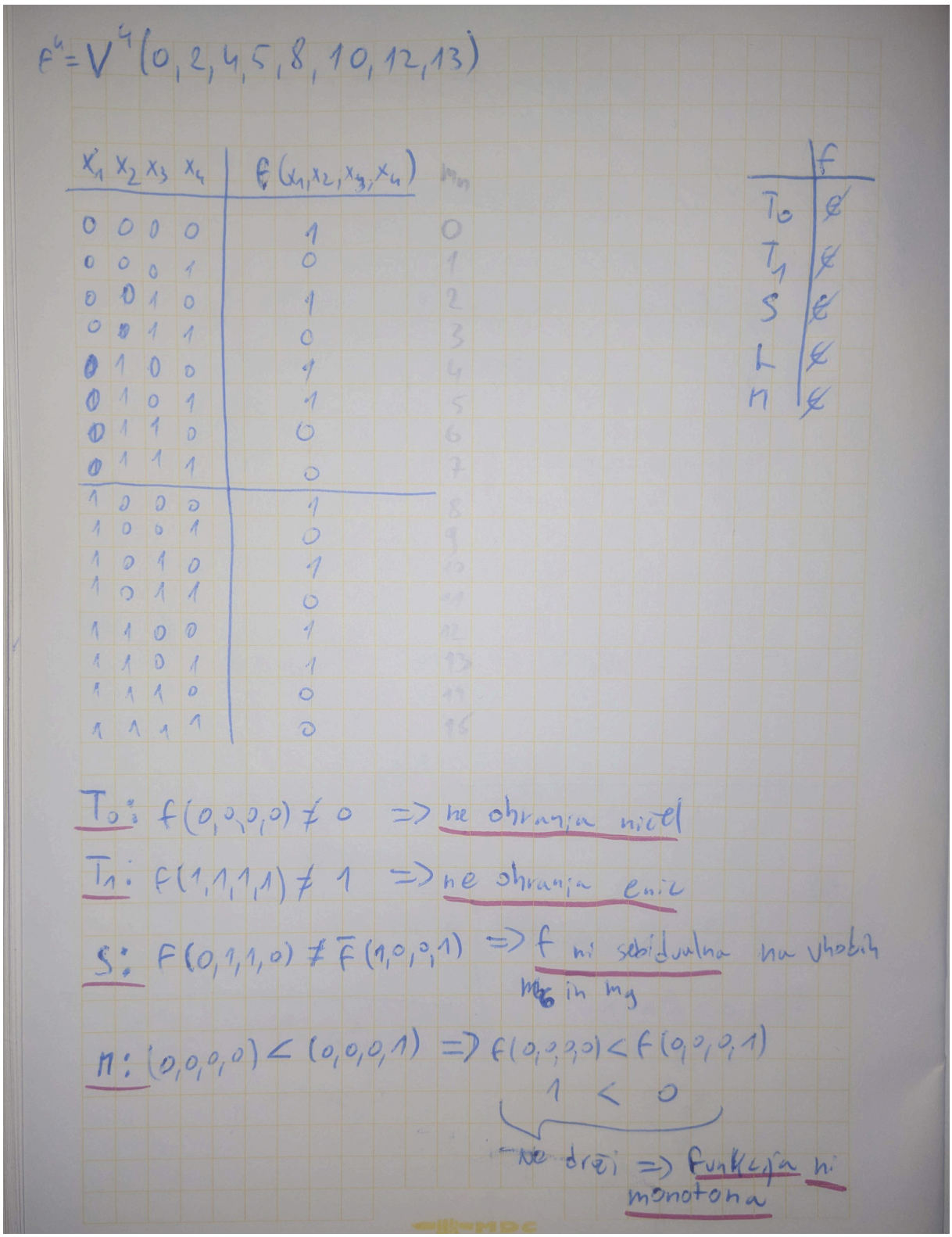
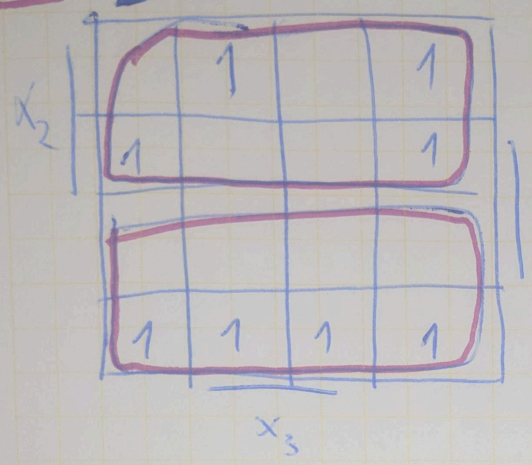
OSNOVE DIGITALNIH VEZIJ

4. Domača naloga, Janez Justin



L:



x_2 ni samo enaka
ali samo različna
$\overline{x_2}$ $\Rightarrow$ f ni linearna

$f_L = a_0 \Delta a_1 x_1 \Delta a_2 x_2 \Delta a_3 x_3 \Delta a_4 x_4$

$a_0 = f_L(0,0,0,0) = f(0,0,0,0) = 1$

a_4: $f_L(0,0,0,1) = a_0 \Delta a_4 x_4 = 1 \Delta a_4$ } $a_4 = 1$
$f(0,0,0,1) = 0$

a_3: $f_L(0,0,1,0) = 1 \Delta a_3$ } $a_3 = 0$
$f(0,0,1,0) = 1$

a_2: $f_L(0,1,0,0) = 1 \Delta a_2$ } $a_2 = 0$
$f(0,1,0,0) = 1$

a_1: $f_L(1,0,0,0) = 1 \Delta a_1 = \overline{a_1}$ } $a_1 = 0$
$f(1,0,0,0) = 1$

$f_L(x_1, x_2, x_3, x_4) = 1 \Delta x_4 = \overline{x_4}$

Protiprimer: $f(0,1,0,1) \neq f_L(0,1,0,1)$ $\Rightarrow$ f ni linearna