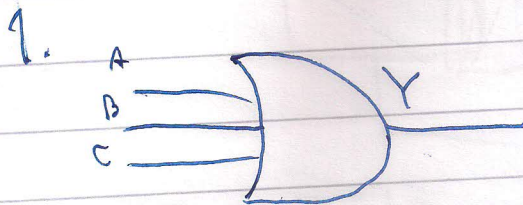


$$\overline{B}D \cdot (\overline{A} + C) + A\overline{C}D + B\overline{D} \cdot (\overline{A} + \overline{C})$$

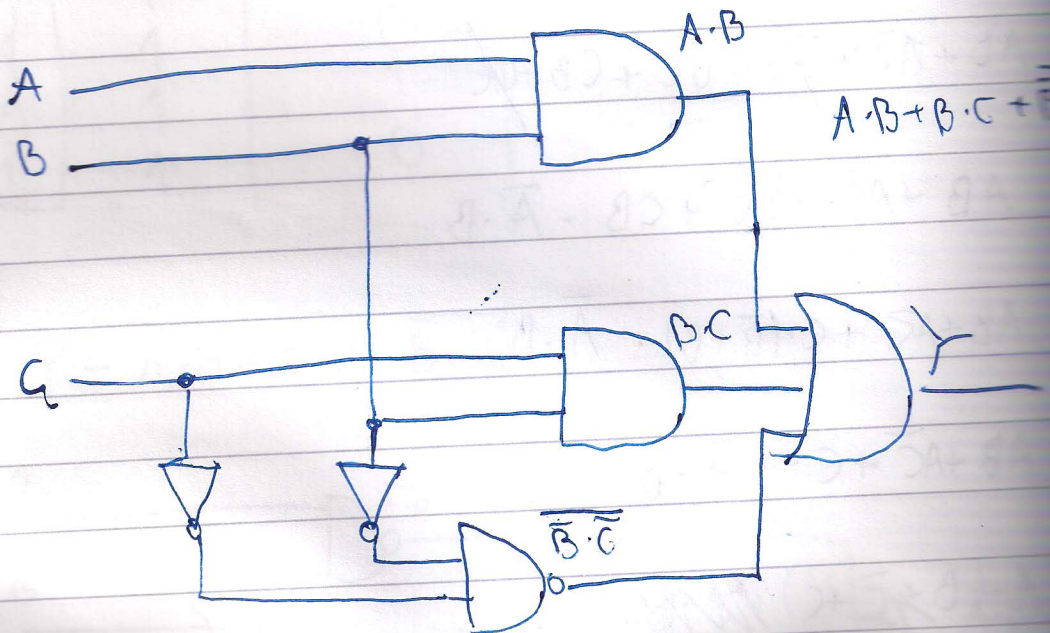
$$\underline{\overline{B}D\overline{A}} + \underline{\overline{B}DC} + \underline{A\overline{C}D} + \underline{B\overline{D}\overline{A}} + \underline{B\overline{D}\overline{C}}$$

~~$$A(\overline{B}D + B\overline{D})$$~~



A	B	C	Y	Y
0	0	0	<del>0</del>	0
0	0	1	<del>0</del>	1
0	1	0	<del>0</del>	1
0	1	1	<del>0</del>	1
1	0	0	<del>0</del>	1
1	0	1	<del>0</del>	1
1	1	0	<del>0</del>	1
1	1	1	<del>1</del>	1

2.





	A	B	C	A·B	B·C	$\bar{B}·\bar{C}$	Y
0	0	0	0	0	0	0	0
1	0	0	1	0	0	1	1
2	0	1	0	0	0	1	1
3	0	1	1	0	1	1	1
4	1	0	0	0	0	0	0
5	1	0	1	0	0	1	1
6	1	1	0	1	0	1	1
7	1	1	1	1	1	1	1

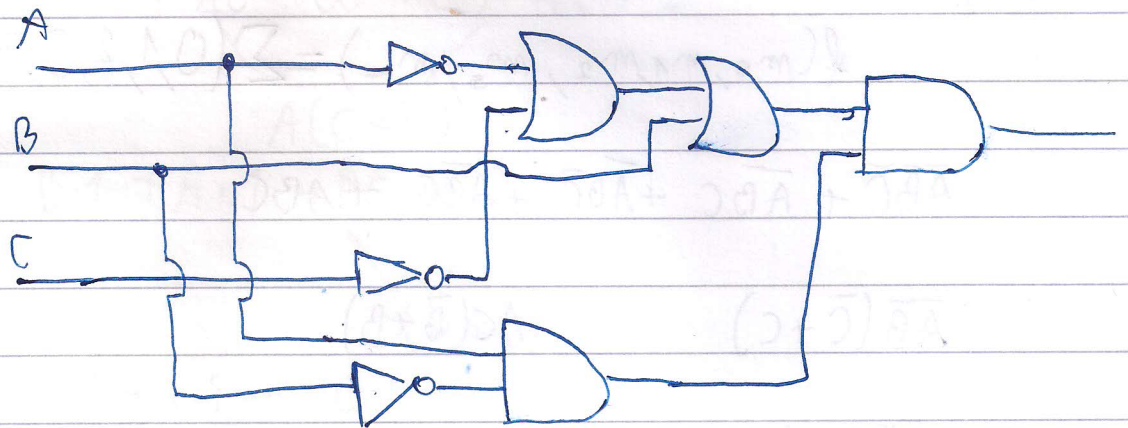
$M_0$  #

$M_1$

3.

$$f = (\bar{A}\bar{C} + B) \cdot A\bar{B} \quad 1, 14, NE$$

$$f = (\bar{A} + \bar{C} + B) \cdot A\bar{B}$$



$$f = (\bar{A}\bar{C} + B) \cdot A\bar{B}$$

$$(\bar{A} + \bar{C} + B) \cdot A\bar{B}$$

~~$$\bar{A}\bar{A}\bar{B} + \bar{C}\bar{A}\bar{B} + B\bar{A}\bar{B}$$~~

$$\bar{C} \cdot A \cdot \bar{B}$$

$$\overline{C+A} \cdot B$$

$$\overline{C+A+B}$$



1.

$$B+1=1$$

$$\bar{B} \cdot B = 0$$

$$\bar{A} \cdot (B+C) = \bar{A}B + \bar{A}C$$

$$\bar{A} + \bar{A}B = \bar{A}$$

$$\overline{A+B} = \bar{A} \cdot \bar{B}$$

$$\overline{A+B+C} = \bar{A} \cdot \bar{B} \cdot \bar{C}$$

2.

$$m_0 = \bar{A}\bar{B}\bar{C}$$

$$m_1 = \bar{A}B\bar{C}$$

$$m_2 = \bar{A}B\bar{C}$$

$$m_3 = \bar{A}BC$$

$$m_4 = ABC$$

$$f(m_0, m_1, m_2, m_3, m_4) = \sum(0, 1, 2, 3, 4)$$

$$\bar{A}\bar{B}\bar{C} + \bar{A}B\bar{C} + \bar{A}B\bar{C} + \bar{A}BC + ABC$$

$$\bar{A}\bar{B}(\bar{C}+C)$$

$$AC(\bar{B}+B)$$

$$\bar{A}\bar{B} + \bar{A}B\bar{C} + AC$$

3.

$$f = (\bar{A}C + C) + \bar{B}C$$

$$(\bar{A} + \bar{C} + C) + B + \bar{C}$$

$$1 + B + \bar{C}$$

$$(A \cdot B + \bar{C}) \cdot (\bar{A} \cdot \bar{B} + C) + (A \cdot \bar{C})$$

$$(A \cdot B + \bar{C}) \cdot (\bar{A} + B + C) + (A \cdot \bar{C})$$

$$\cancel{A\bar{A}} + AB + AC + B\bar{A} + BB + BC + \bar{C}\bar{A} + CB + \cancel{C\bar{C}}$$

$$AB + AC + B\bar{A} + B + BC + \bar{C}\bar{A} + CB$$

$$B(A + \bar{A} + 1)$$

$$B \cdot 1 + AC + BC + \bar{C}\bar{A} + CB$$

$$A(C + \bar{C})$$

$$B \cdot 1 + A \cdot 1 + BC + BC$$

$$C(B + B)$$

$$B \cdot 1 + A \cdot 1 + BC$$

$$\bar{B} + C \cdot B + A \cdot \bar{B} + C$$

$$B \cdot \bar{C} +$$

$$B \cdot \bar{C} \cdot B + A \cdot \bar{B} + C$$

$$B\bar{C} + A\bar{B} + C$$



$$Y = \overline{A(\bar{B} + C)} + B(AC + B)$$

$$A(\bar{B} + C) \cdot \overline{B(AC + B)}$$

$$A(\bar{B} + C) \cdot \overline{B} + \overline{(AC + B)}$$

$$A(\bar{B} + C) \cdot \overline{B} + (\overline{AC} \cdot \overline{B})$$

$$A(\bar{B} + C) \cdot \overline{B} + (\overline{A} + \overline{C}) \cdot \overline{B}$$

$$A(\bar{B} + C) \cdot \overline{B} + (\overline{A} + \overline{C} \cdot \overline{B})$$

$$A\overline{B} + AC \cdot \overline{B} + \overline{A} + \overline{C}\overline{B}$$

$$A\overline{B} + AC\overline{B} + \overline{A} + \overline{C}\overline{B}$$

$$A(\overline{B} + \overline{C}\overline{B}) + \overline{A} + \overline{C}\overline{B}$$

$$A(\overline{B} + C) \cdot (\overline{B} + \overline{B}) + \overline{A} + \overline{C}\overline{B}$$

1/11

$$(A+0) \cdot \overline{A}\overline{B}\overline{C} + \overline{C} + \overline{D} + \overline{B} + A\overline{D}$$

$$(A+0) \cdot \overline{A}\overline{B}\overline{C} + \overline{C}\overline{D} + \overline{B} + A\overline{D}$$

$$(A+0) \cdot \overline{A}\overline{B}\overline{C} + \overline{C}\overline{D}(A+0)$$

~~AABC~~

~~AABC~~

$$\overline{A} \overline{A} \overline{B} \overline{C} + \overline{D} \overline{A} \overline{B} \overline{C} + \overline{C} \overline{D} \overline{B} \overline{A} + \overline{C} \overline{D} \overline{B} \overline{D}$$

$$\overline{B} \overline{C} + \overline{D} \overline{A} \overline{B} \overline{C} + \overline{C} \overline{D} \overline{B} \overline{A} + \overline{C} \overline{D} \overline{B}$$

$$\overline{B} \overline{A} \overline{C} (D + \overline{D})$$

$$\overline{B} \overline{C} + \overline{B} \overline{A} \overline{C} + \overline{C} \overline{D} \overline{B}$$

$$\overline{C} (B + B \overline{A} + \overline{D} B)$$

$$\overline{C} (B + B) \cdot (B + \overline{A})$$

$$\overline{A} + \overline{B} \cdot (\overline{A} \overline{B} + C) \cdot (B + \overline{C})$$

$$\overline{A} \overline{B} \cdot (\overline{A} \overline{B} + C) \cdot (B + \overline{C})$$

$$\overline{A} \overline{B} \overline{A} \overline{B} + \overline{A} \overline{B} C \cdot (B + \overline{C})$$

$$\overline{A} \overline{A} \overline{B} \overline{B} + \overline{A} \overline{B} C \cdot (B + \overline{C})$$

$$\overline{A} \overline{B} C \cdot (B + \overline{C})$$

$$\overline{A} \overline{B} C (1 + \overline{C})$$

$$\overline{A} \overline{B} C + \overline{A} \overline{B} C \overline{C}$$

$$\overline{A} \overline{B} C$$



$$f(A, B, C, D) = \sum(1, 4, 7, 8, 12)$$

A	B	C	D	Y
0	0	0	0	0
0	0	0	1	1
0	0	1	0	0
0	0	1	1	0
0	1	0	0	1
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
1	0	0	0	1
1	0	0	1	0
1	0	1	0	0
1	0	1	1	0
1	1	0	0	1
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

1.

<del>A</del>	A	B	C	f
	0	0	0	1
	0	0	1	1
	0	1	0	0
	0	1	1	1
	1	0	0	1
	1	0	1	1
	1	1	0	0
	1	1	1	0

$$f(A, B, C) = \sum (0, 1, 3, 4, 5)$$

$$f(A, B, C) = \prod (2, 6, 7)$$

$$\bar{A}\bar{B}\bar{C} + \bar{A}\bar{B}C + \bar{A}B\bar{C} + A\bar{B}\bar{C} + A\bar{B}C$$

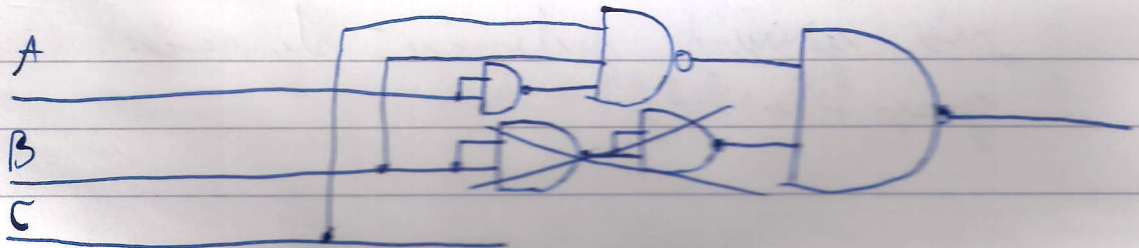
$$\bar{A}\bar{B} + \bar{A}B\bar{C} + A\bar{B}\bar{C} + A\bar{B}C$$

$$\bar{A}\bar{B} + \bar{A}B\bar{C} + A\bar{B} \quad A(\bar{B}\bar{C} + \bar{B}C)$$

$$\bar{A}\bar{B} + A\bar{B} + \bar{A}B\bar{C} \quad A(\bar{B}(\bar{C} + C))$$

$$\bar{B} + \bar{A}B\bar{C} \quad A\bar{B}$$

$$\bar{B} \cdot \overline{\bar{A}B\bar{C}} = \bar{B} \cdot \overline{\bar{A}BC}$$





# K-tabelle

1.

$f(AB)$

AB	f
00	0
01	1 $\rightarrow \bar{A}B$
11	0
10	1 $\rightarrow AB$

$\bar{A}$	0	1
B	00 0	<del>01</del> 10
1	01 1	11 1

↓

Možemo li isto reći u razpis!!!

1	1

AB	00	01	11	10
C	000 0	010 0	110 0	100 1
1	001 1	011 1	111 0	101 1

$\bar{A}B \rightarrow \bar{A}C$   
 $A\bar{B} \rightarrow B$   
 $B+AC$   
 jer  $\bar{A}B$   
 $B$

$f(A,B,C) = \sum(0,1,3,4,5)$  npr.

grupirajte možemo, 2, 4, 8, 16...!!!

U K-tabeli gledamo možemo li što reći grupirajući jedinice = što reći grupirajući jedinice = što reći grupirajući jedinice!



2.

$$Q(A, B, C, D) = \sum (0, 1, 2, 3, \cancel{4, 5}, 10, 11, 12, 13, 14, 15)$$

	AB		
	00	01	11
C	00	1	
	01	1	
	11	1	1
	10	1	1

unijak štu nise  
grajim

~~ABCD~~  
~~ABCD~~

B

B je u jednoj sa svu dva seta...  
Rjesenje  $\bar{A}\bar{B} + AB + AC$

~~$\bar{A}\bar{B}\bar{C}$~~

	A		
	00	01	11
C	00	1	1
	01		
	11	1	1
	10	1	1

$$Q(A, B, C, D) = \sum (0, 2, 3, 4, 6, 7, 8, 9, 15)$$

~~$A\bar{B}\bar{C}$~~

~~$A\bar{B}\bar{C}$~~

D

~~$ABCD$~~

$BCD$

~~$\bar{A}\bar{B}\bar{C}$~~   
 $\bar{A}\bar{C}$

~~$\bar{A}\bar{B}\bar{C}$~~   
 $\bar{A}\bar{D}$

$$\bar{A}\bar{C} + \bar{A}\bar{D} + BCD + \bar{A}\bar{B}\bar{C}$$





2. ishd

$P_1 P_2 P_3 P_4 \quad P_5 P_6 P_7 P_8 \quad P_9 P_{10} P_{11} P_{12} P_{13} P_{14} \quad P_{15}$   
 $0 \underline{1} \underline{1} \underline{0} \quad 100, \underline{0} \underline{1} \underline{0} \quad \underline{0} \underline{1} \underline{0}, \underline{? ?}$

1.

$\underline{0} \underline{0} \underline{1} \underline{0} \underline{1} \underline{1} \underline{1} \underline{1} \quad \underline{0} \underline{1} \underline{1} \underline{0} \underline{1} \underline{0} \underline{0} \underline{0}$

2.

0, 3, 7, 9

0	0011
0	0110
0	1010
0	1100
1	0011

3.

$P_1$	$P_2$	$P_3$	$P_4$	$P_5$	$P_6$	$P_7$	$P_8$	$P_9$	$P_{10}$	$P_{11}$	$P_{12}$	$P_{13}$	$P_{14}$	$P_{15}$	$P_{16}$
1	1	1	0	1	1	0	0	1	0	1					

4.

$\ddot{0} \ddot{0} \ddot{1} \ddot{1} \quad 1010 \quad 0011 = \sqrt{\ddot{0} \ddot{0} \ddot{0} \ddot{1} \quad 1010 \quad 0011}$

$C_1 = 1$	↑	$01010011$
$C_2 = 1$		$0011 = 3 \text{ bits}$
$C_3 = 0$		
$C_4 = 0$		