Abdelrahman Ehab Street 1 1182202266

1

X \ YZ	00	01	11	10
0	0	0	0	1
1	1	0	0	1

$A = Y\bar{Z} + X\bar{Z} + \bar{X}\bar{Y}Z$

$\bar{A} = YZ + X\bar{Y}Z + \bar{X}\bar{Y}\bar{Z}$

X \ YZ	00	01	11	10
0	1	1	0	0
1	0	0	1	1

$B = \bar{X}\bar{Y} + XY$

$\bar{B} = X\bar{Y} + \bar{X}Y$

X \ YZ	00	01	11	10
0	0	0	0	1
1	0	0	0	1

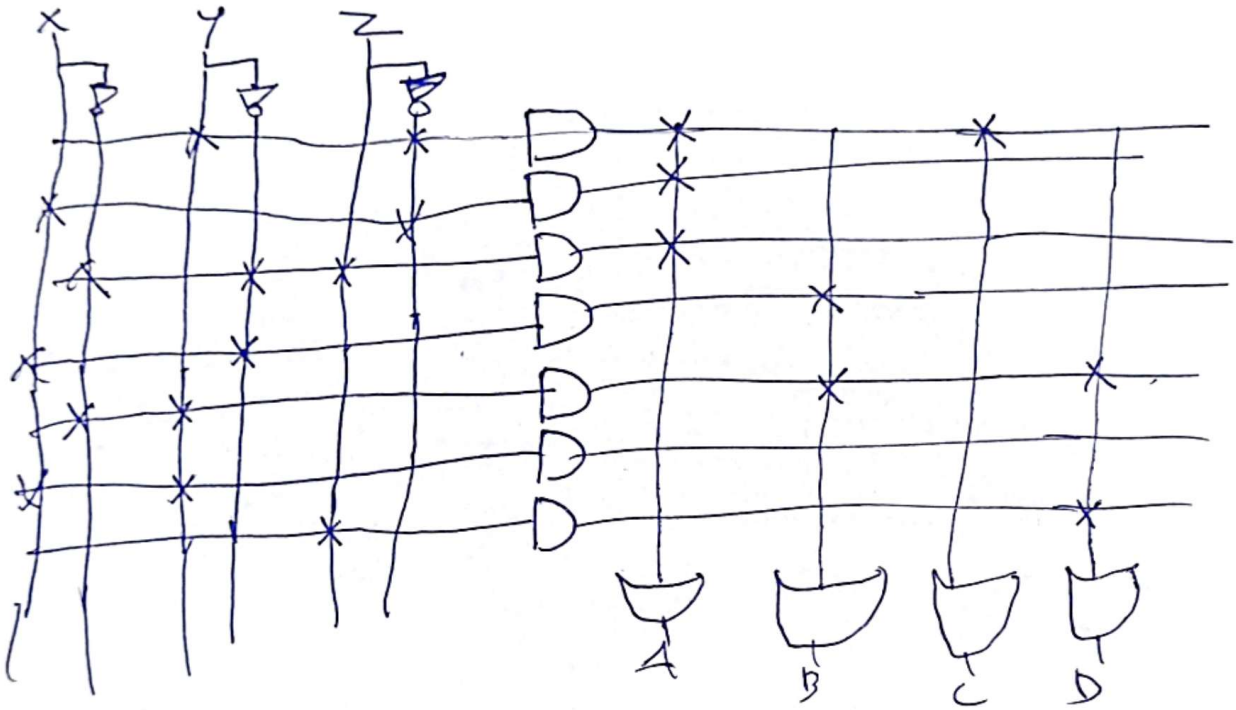
$C = Y\bar{Z}$

$\bar{C} = \bar{Z} + \bar{Y}$

X \ YZ	00	01	11	10
0	0	1	1	1
1	0	1	1	0

$D = Z + \bar{X}Y$

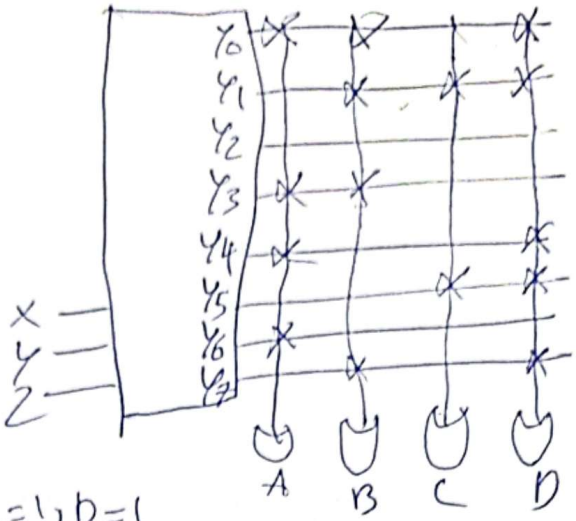
$\bar{D} = \bar{Y}\bar{Z} + X\bar{Z}$



2

1	1	0	1	0
0	1	1	1	1
0	0	0	0	2
1	1	0	0	3
1	0	0	1	4
0	0	1	1	5
1	0	0	0	6
0	1	0	1	7

XYZ



At address 1 A=0, B=1, C=1, D=1

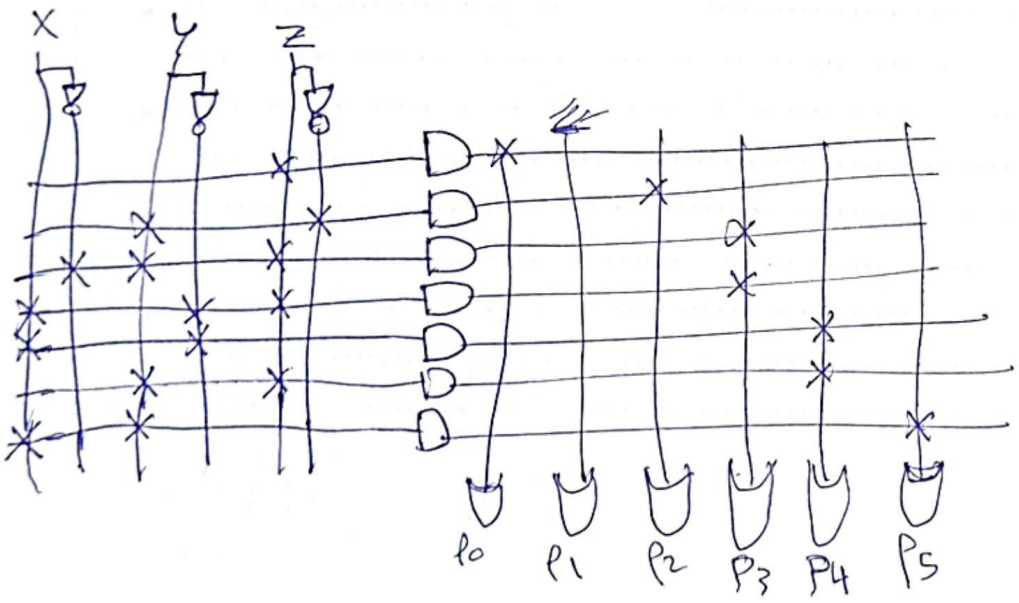
At address 4 A=1, B=0, C=0, D=1

3

X	Y	Z	P5	P4	P3	P2	P1	P0
0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	1
0	1	0	0	0	0	1	0	0
0	1	1	0	0	1	0	0	1
1	0	0	0	1	0	0	0	0
1	0	1	0	1	1	0	0	1
1	1	0	1	0	0	1	0	0
1	1	1	1	1	0	0	0	1

$P_0 = Z$, $P_1 = 0$, $P_2 = \bar{Y}Z$, $P_3 = \bar{X}YZ$, $P_4 = X\bar{Y}\bar{Z} + XYZ$,

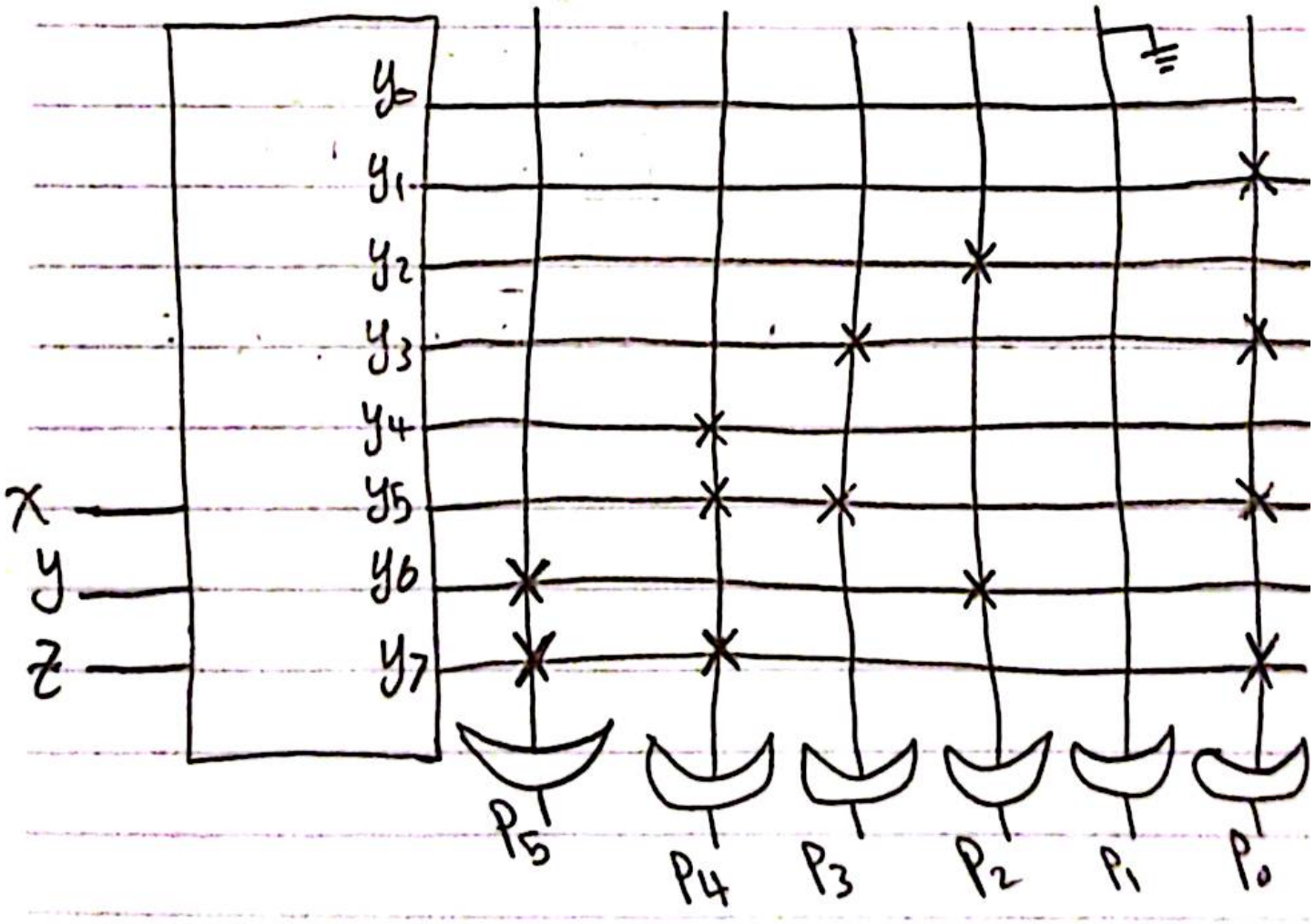
$XZ + X\bar{Y}\bar{Z}$, $P_5 = XY$



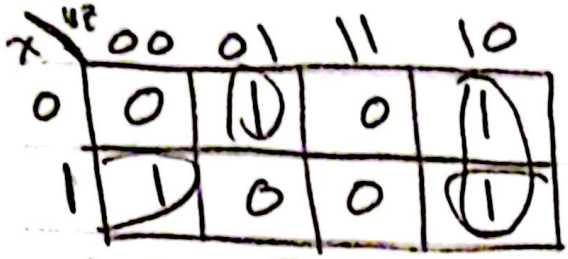
4

8 X 6 ROM

xyz						
0	0	0	0	0	0	0
0	0	0	0	0	1	
0	0	0	1	0	0	
0	0	1	0	0	1	
0	1	0	0	0	0	
0	1	1	0	0	1	
1	0	0	1	0	0	
1	1	0	0	0	1	

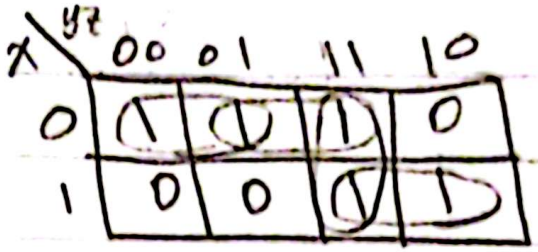


5



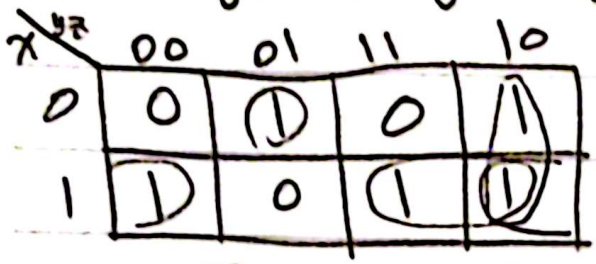
$A = y\bar{z} + x\bar{z} + \bar{x}\bar{y}z$

$\bar{A} = yz + x\bar{y}z + \bar{x}\bar{y}\bar{z}$



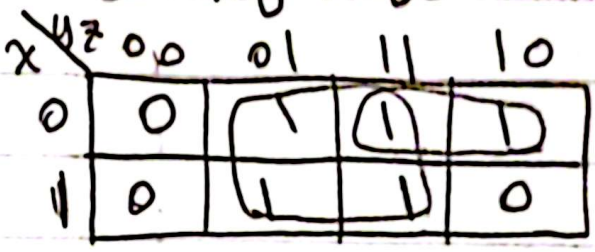
$B = \bar{x}\bar{y} + x.y + \{\begin{matrix} yz \\ \bar{x}z \end{matrix}\}$

$\bar{B} = x\bar{y} + \bar{x}y\bar{z}$



$C = y\bar{z} + xy + x\bar{z} + \bar{x}\bar{y}z$

$\bar{C} = \bar{x}\bar{y}\bar{z} + x\bar{y}z + \bar{x}yz$



$D = z + \bar{x}y$

$\bar{D} = \bar{y}\bar{z} + x\bar{z}$

let $G = y\bar{z} + x\bar{z}$