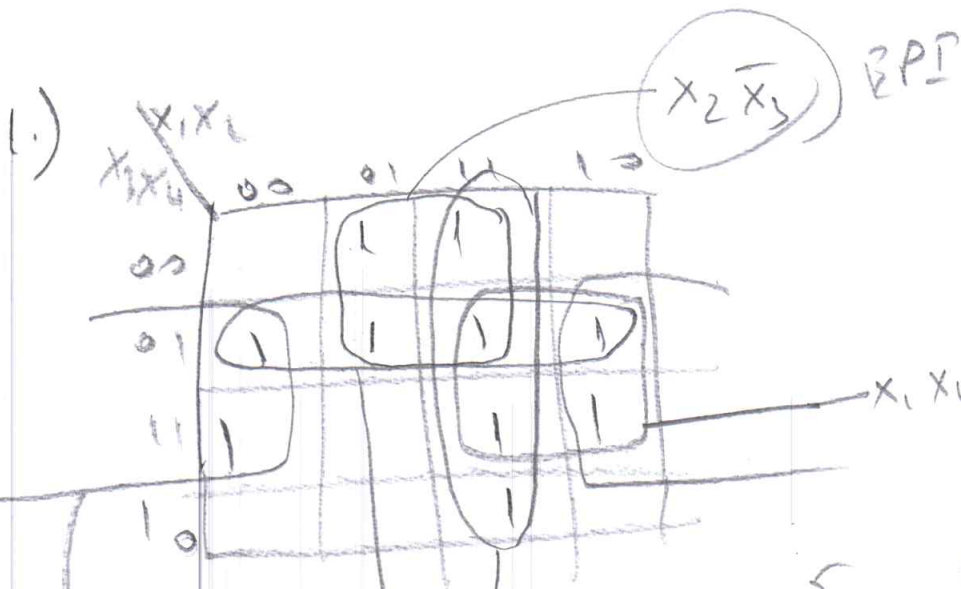


QUIZ II SOLUTIONS



5 PPIs
3 EPIs

$\bar{x}_2 x_4$
EPI

$\Rightarrow f = x_1 x_2 + x_2 \bar{x}_3 + \bar{x}_2 x_4$

2.)

a.)

	A_1	A_0	B_1	B_0	P_3	P_2	P_1	P_0
0	0	0	0	0	0	0	0	0
0	0	0	0	1	0	0	0	0
0	0	0	1	0	0	0	0	0
0	0	0	1	1	0	0	0	0
0	0	1	0	0	0	0	0	0
0	0	1	0	1	0	0	0	0
0	0	1	1	0	0	0	0	0
0	0	1	1	1	0	0	0	0
1	0	0	0	0	0	0	1	1
1	0	0	0	1	0	0	1	1
1	0	0	1	0	0	0	1	1
1	0	0	1	1	0	0	1	1
1	0	1	0	0	0	0	1	1
1	0	1	0	1	0	0	1	1
1	0	1	1	0	0	0	1	1
1	0	1	1	1	0	0	1	1
1	1	0	0	0	0	1	0	0
1	1	0	0	1	0	1	0	0
1	1	0	1	0	0	1	0	0
1	1	0	1	1	0	1	0	0
1	1	1	0	0	0	1	1	0
1	1	1	0	1	0	1	1	0
1	1	1	1	0	0	1	1	0
1	1	1	1	1	0	1	1	0

b)

P_3

$A_1 A_0$				
$B_1 B_0$	00	01	11	10
00				
01			1	
11				
10				

$$P_3 = A_1 A_0 B_1 B_0$$

P_2

$A_1 A_0$				
$B_1 B_0$	00	01	11	10
00				
01				
11			1	1
10			1	

$$P_2 = A_1 B_1 \bar{B}_0 + A_1 \bar{A}_0 B_1$$

P_1

$A_1 A_0$				
$B_1 B_0$	00	01	11	10
00			1	1
01				
11	1			1
10	1		1	

$$P_1 = A_1 \bar{B}_1 B_0 + A_1 \bar{A}_0 B_0 + \bar{A}_1 A_0 B_1 + A_0 B_1 \bar{B}_0$$

P_0

$A_1 A_0$				
$B_1 B_0$	00	01	11	10
00				
01		1	1	
11		1	1	
10				

$$P_0 = A_0 B_0$$