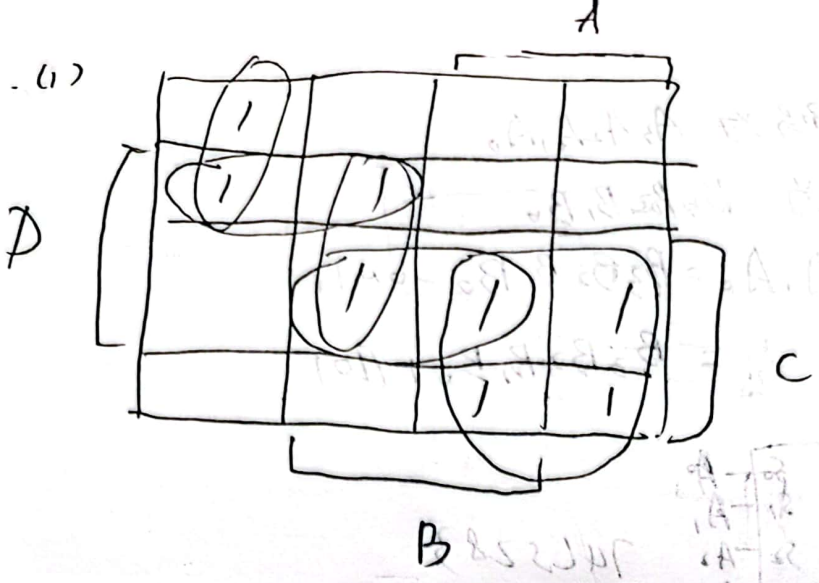
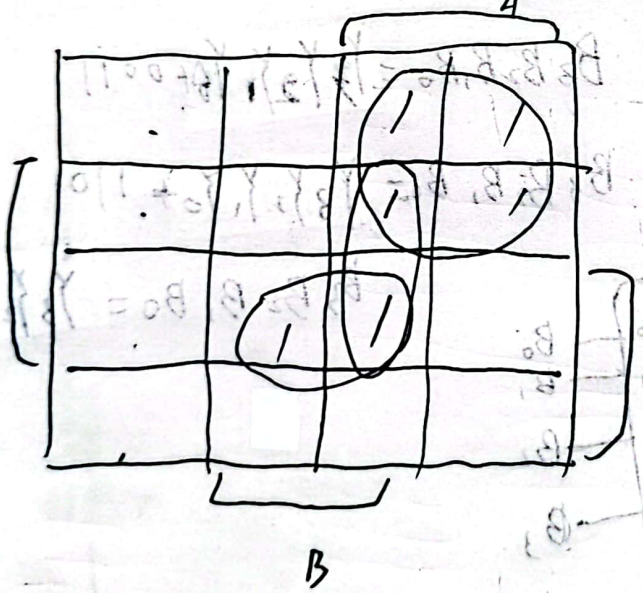
2.12.(1)

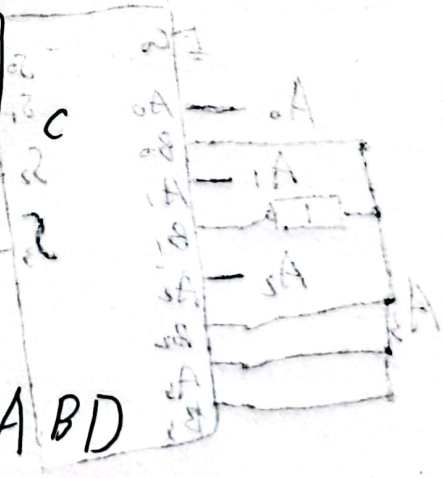


$$F = \bar{A}\bar{B}\bar{C} + \bar{A}\bar{C}D + BCD + AC + \bar{A}BD$$

(2) $F = \Pi M^4(0,1,2,3,4,5,6,10,11,14)$

$= \Sigma m^4(7,8,9,12,13,15)$

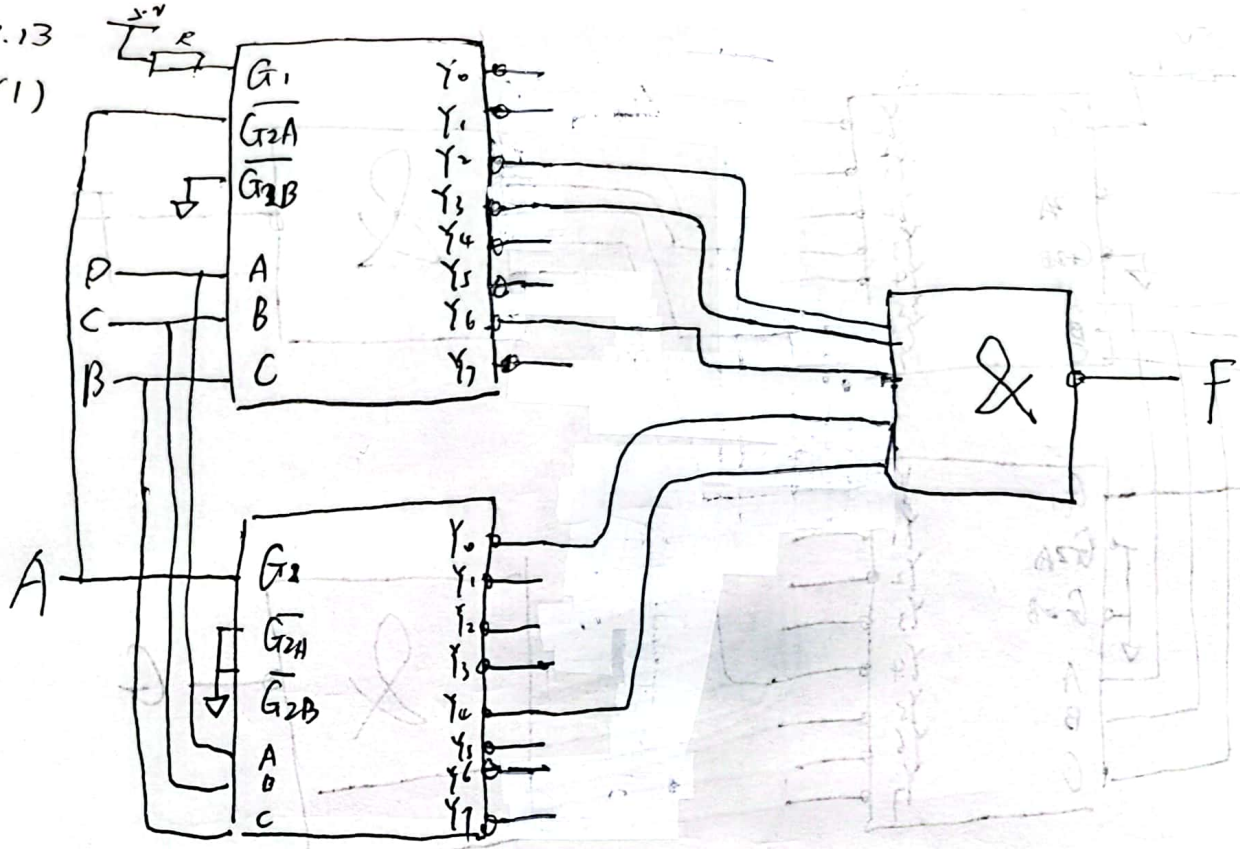




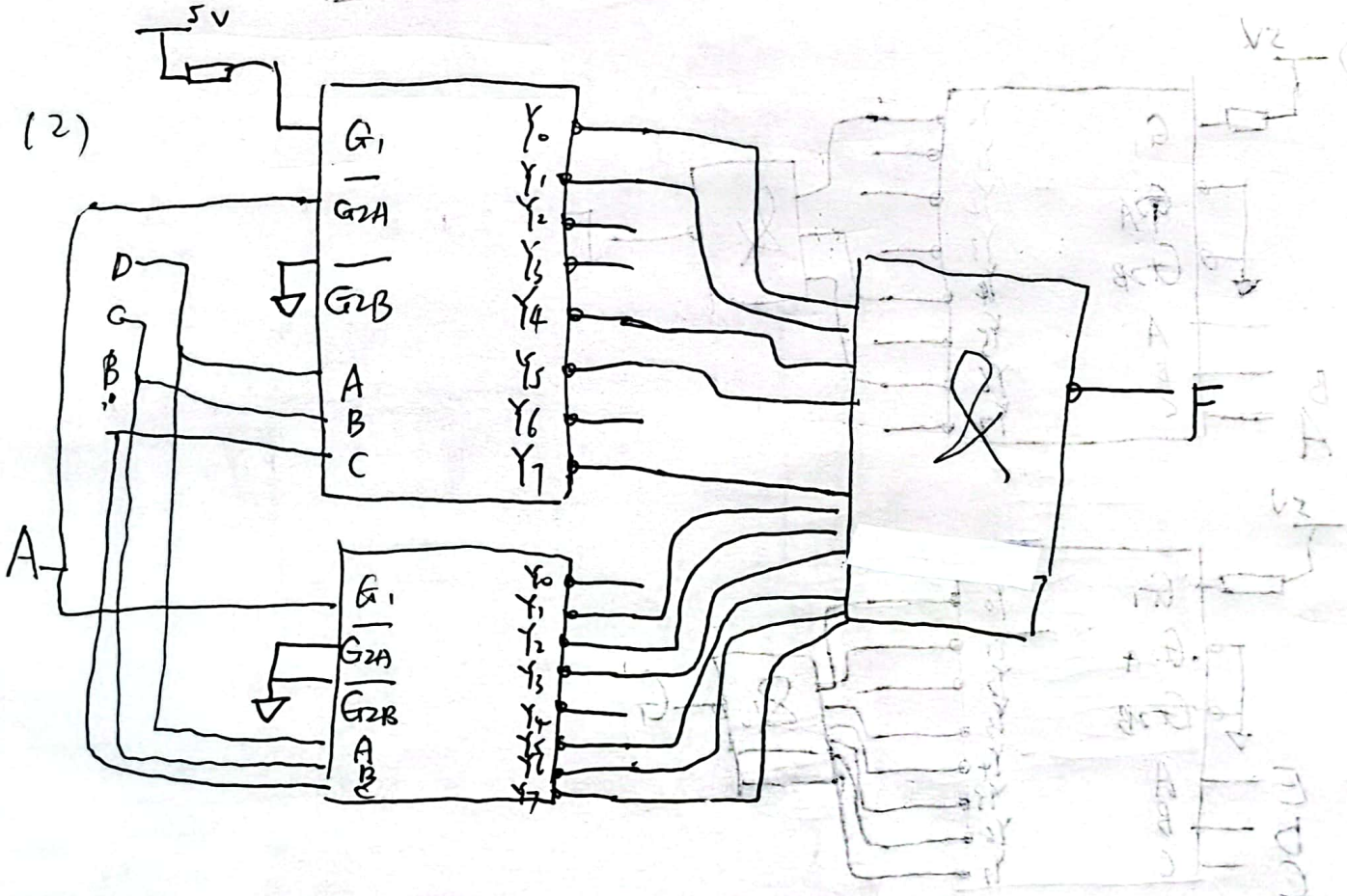
$$F = A\bar{C} + BCD + ABD$$

2.13

(1)



(2)

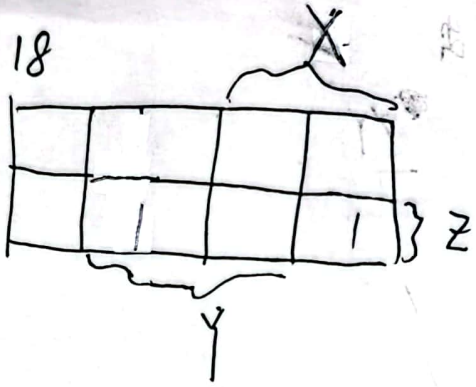


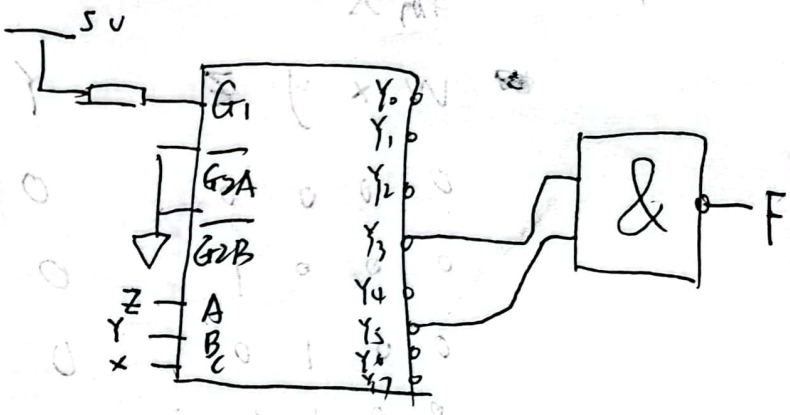
2.17

输入				输出	
W	X	Y	Z	Y	Y
0	0	0	0	0	1
0	0	0	1	0	1
0	0	1	0	0	1
0	0	1	1	1	0
0	1	0	0	1	0
0	1	0	1	1	0
0	1	1	0	1	0
0	1	1	1	1	0
1	0	0	0	0	1
1	0	0	1	1	0
1	0	1	0	1	0
1	0	1	1	0	1
1	1	0	0	1	0
1	1	0	1	0	1
1	1	1	0	1	0
1	1	1	1	1	0

2.18

(1)



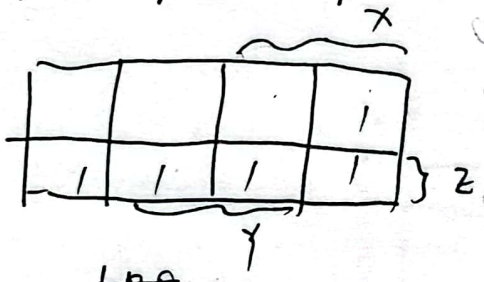


011 , 101

3, 5

$F=\sum m^3(3,5)$

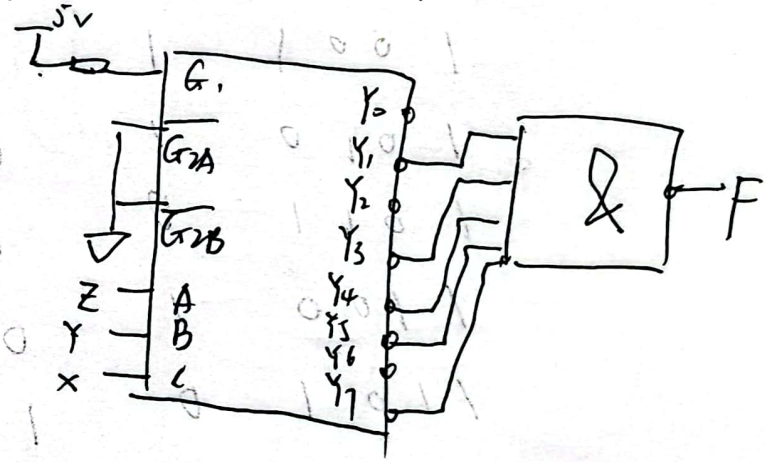
(2) $F=X\bar{Y}\bar{Z}+X\bar{Y}+\bar{Z}$



~~000~~ ,

1, 3, 4, 5, 7

$F=\sum m^3(1,3,4,5,7)$

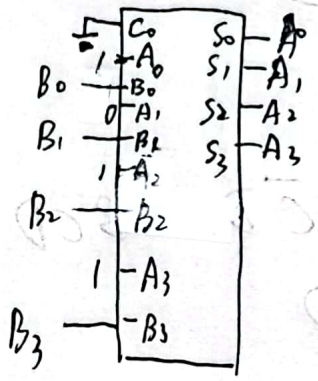


2.19. (1) 设 8421 码为 $A_3A_2A_1A_0$,

余 3 码为 $B_3B_2B_1B_0$.

则 $A_3A_2A_1A_0 = B_3B_2B_1B_0 - 0011$

$= B_3B_2B_1B_0 + (1101)$



(2) 设 2421 码为 $A_3A_2A_1A_0$,

余 3 码为 $B_3B_2B_1B_0$.

当 $A_3=0$ 时, $B_3B_2B_1B_0 = A_3A_2A_1A_0 + 0011$

当 $A_3=1$ 时, $B_3B_2B_1B_0 = A_3A_2A_1A_0 + 1101$

$B_3B_2B_1B_0 = A_3A_2A_1A_0 + A_3A_3\bar{A}\bar{A}$