1. F
2. T
3. T
4. F
5. T
6. 送分
7. T
8. F

二、 1. (a) $(452.4)_8 = (12A.8)_{16}$

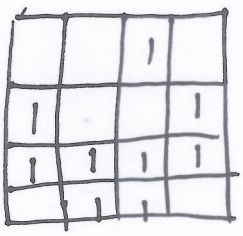
(b) $(40.4)_8$

2. (a) 0111 111 , +63 , overflow

(b) 1101 011 , -21 , no overflow

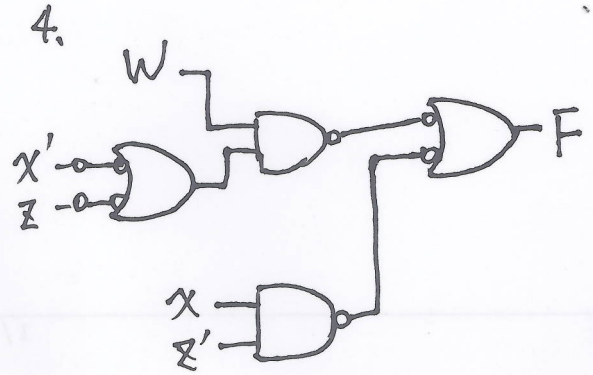
3. $F = (ad + b'c + bd')(b+d)$

$= abd + bd' + ad + b'cd$

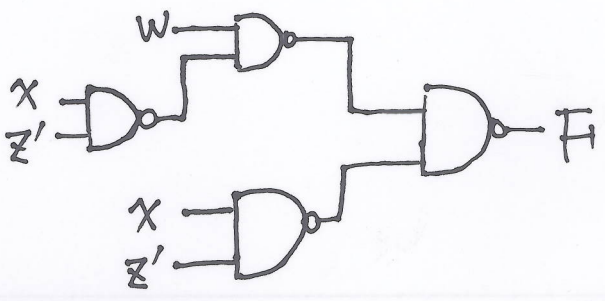


$F = \pi(0, 1, 2, 5, 7, 8, 10)$

4.

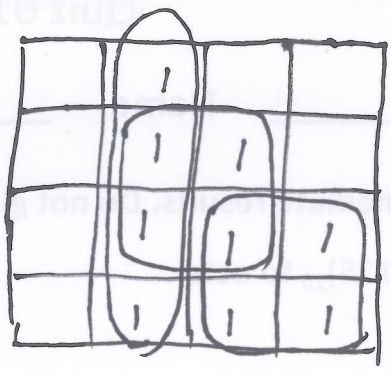


⇒



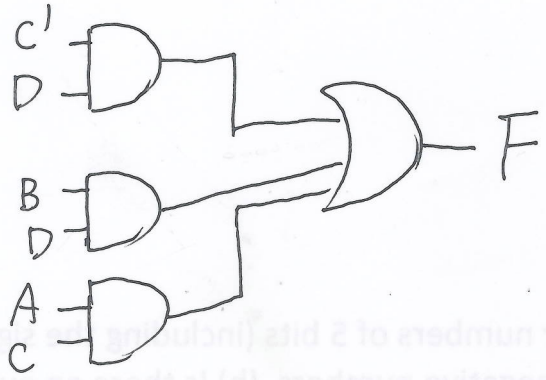
5. $F = wxy'z$ m13
$+ w'xy'z$ m5
$+ wx'y'z$ m9
$+ w'x'y'z$ m1
$+ w'xyz$ m7
$+ w'xyz'$ m6
$+ wx'yz$ m11
$+ wx'yz'$ m10
$+ wxyz$ m15
$+ wxyz'$ m14

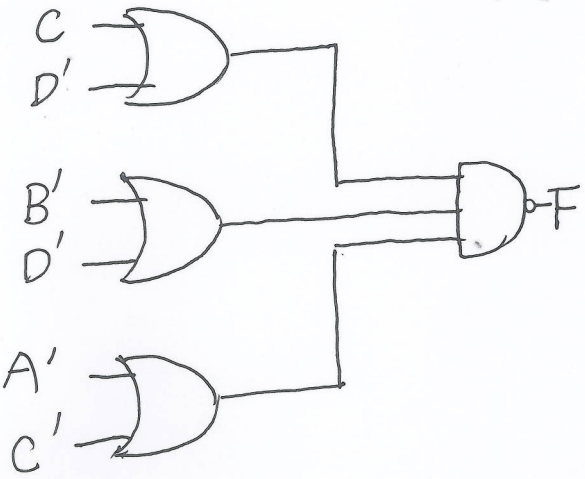
$F = \Sigma(1,5,6,7,9,10,11,13,14,15)$



$F = C'D + BD + AC$

$= ((C + D')(B' + D')(A' + C'))'$

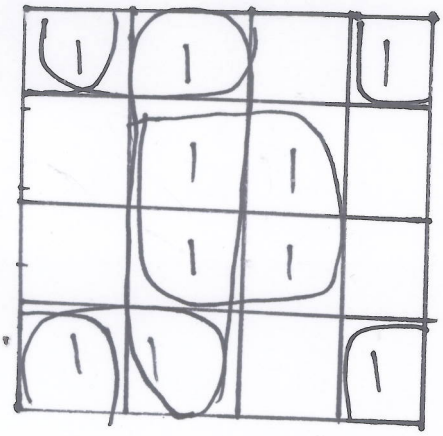




OAI

6. $F = \Pi(3,4,6,11,12,14)$

$= \Sigma(0,1,2,5,7,8,9,10,13,15)$.



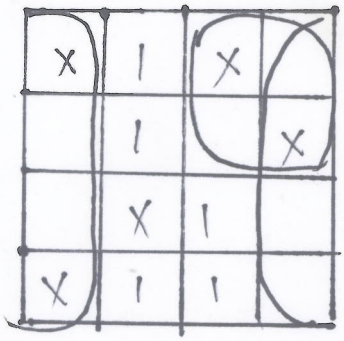
(a) $PIs = BD, B'D', C'D, B'C'$

$EPIs = BD, B'D'$

(b) $F = BD + B'D' + C'D$ or

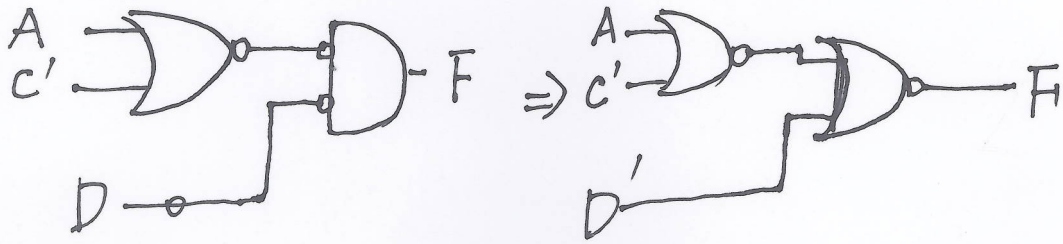
$F = BD + B'D' + B'C'$

7.



$F' = D' + A'C$

$F = D(A + C')$



8. $x(x+y) = x \cdot x + x \cdot y$ $P_4(a)$

$= x + x \cdot y$ $T_1(b)$

$= x \cdot 1 + x \cdot y$ $P_2(b)$

$= x(1+y)$ $P_4(a)$

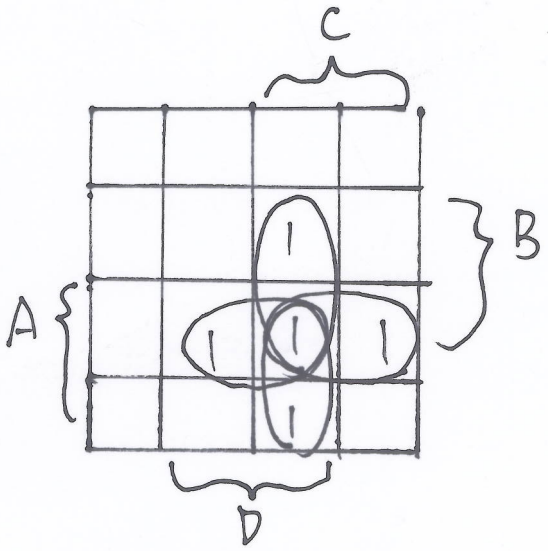
$= x(y+1)$ $P_3(a)$ (optional)

$= x \cdot 1$ $T_2(a)$

$= x$

9.

A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	0
1	0	1	1	1
1	1	0	0	0
1	1	0	1	1
1	1	1	0	1
1	1	1	1	1



$F = ABD + ABC + BCD + ACD$