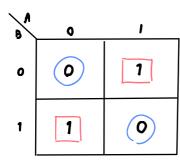
1.



50P F= AB'+ A'B

2-3 F' = A'B' + AB

(E')' = (A'0' + AB)

F = (A+B)(A'+B')

2.

Truth table

A	В	Cin	Sum	Cont
0	0	0	0	0
	0	1	1	0
0	1	0	1	0
0		1	0	1
0	'	'	.	
1	0	0	1	0
1	0	1	0	1
1	1	Q	0	1
1	1	1	1	1

Kmap tos Sum

SoP Fr A'B'Cin + A'B Cin' + ABCin + AB'Cin'

F' = A'B'Cin' + A'BCin + ABCin' + AB'Cin (F')' = (A'B'Cin' + A'BCin + ABCin' + AB'Cin)'

F = (A+B+Cin) + (A+B'+Cin') + (A+B'+Cin) + (A+B+Cin')

Kmap vos Cout

SOP F. AB + ABCIN + ABCIN

F' = AB' + A'BCin' + AB'CIN'

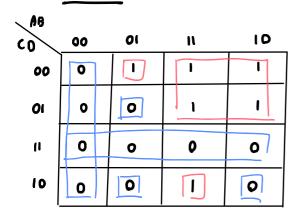
(F') + (A'B' + A'B Gin' + AB' Cin')

F . (A+B) (A+B+Cin) (A+B+Cin)

3. Trush table

A	В	С	0	٤,	2.	2,
0	Q	0	0	0	0	١
0	0	0	1	0	ı	0
0	9	1	0	0	1	0
0	0	1)	0	1	0
0	ı	0	0	1	0	0
0	ı	0	1	0	0	1
0	1	J	0	0	l	٥
0	(1	1	0	ſ	Q
ı	Q	Q	0	1	0	0
1	0	0	1	1	0	0
ı	0	1	0	0	0	ı
1	0	1	1	0	ı	0
ı	ſ	0	0	1	Q	0
ı	1	0	ſ)	0	0
1	1	ı	0	ı	Q	O
(ı	1	1	0	Q	١

ا2 دكمالد



SOP F: AC + ABCD' + ABCD'

Pos F' + P'B' + CD + A'B C'D + A'B CD' + AD'CD'

(F')' = (A'B'+CD + A'B C'D + A'BCD' + AB'CD')'

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

งเน่น รร

√ AB					
(0)	00	01	Ш	10	
00	0	0	0	0	
QI		0	0	0	
u	1	_	0		
10	1	1	0	0	

SOP F. ACT ABCD + ABCD

P.S F' AB+ C'D'+ A'BC'D+ ADC'D + ABC'D' (F')' = (AB + C'O' + A'BC'D + AB'C'D + AB'CD')'

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

1010 5 3

AB	00	O I	11	10
00		0	0	0
QI	0	1	Q	0
11	0	0		0
10	0	0	0	

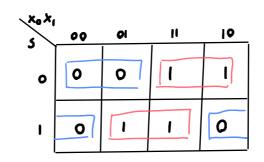
F= ABCO + ABCO + ABCO + ABCO

Pos c'= A'c + Ac'+ A'BCD + A'B'CD + ABCD' (F)': (A'C + AC' + A'BCD' + A'B'C' D + AB'CD + ABCD')'

> F . (A+C')(A'+C)(A+B'+C+D)(A+B+C+D')(A+B+C'+D') (A+B+c+D)

Truth table

S	X.	×ı	2
0	0	o	0
0	0	ı	0
0	ı	0	ı
0	1	ı	ı
1	0	0	0
1	0	ı	ı
ı	1	0	0
ı	1	ι	1



$$\frac{P_0S}{(F')'} = (x_0'S' + x_1'S)'$$

$$F = (x_0 + S)(x_1 + S')$$

XºX'X3								
Sis. X3	000	001	011	010	11.0	(11	10 (100
000	0	0	0	0	I	1	l	ı
001	0	0	0	٥	1	ı	1	1
011	0	0	I	1	1	1	0	0
010	0	0	1	1	ı		0	٥
Jı O	0	0	0	0	0	0	0	0
u i	_	1	-	-	ı	1	_	
101	0	I	1	0	0	_	1	0
100	0	1	L	0	0	-	1	0