

**Groups**

(0,2,4,6,8,10,12,14)	$\overline{D}$
(2,3,6,7,10,11,14,15)	$C$
(0,1,2,3)	$A\overline{B}$
(12,13,14,15)	$AB$

$y = D' + C + AB' + AB$

**Truth Table**

	A	B	C	D	Y
0	0	0	0	0	1
1	0	0	0	1	1
2	0	0	1	0	1
3	0	0	1	1	1
4	0	1	0	0	1
5	0	1	0	1	0
6	0	1	1	0	1
7	0	1	1	1	1
8	1	0	0	0	1
9	1	0	0	1	0
10	1	0	1	0	1
11	1	0	1	1	1
12	1	1	0	0	1
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	1

**Groups**

(0,1,2,3,8,9,10,11)	$\bar{B}$
(0,1,4,5,8,9,12,13)	$\bar{C}$
(1,3,5,7,9,11,13,15)	D
(8,9,10,11,12,13,14,15)	A

$y = B' + C' + D + A$

**Truth Table**

	A	B	C	D	Y
0	0	0	0	0	1
1	0	0	0	1	1
2	0	0	1	0	1
3	0	0	1	1	1
4	0	1	0	0	1
5	0	1	0	1	1
6	0	1	1	0	0
7	0	1	1	1	1
8	1	0	0	0	1
9	1	0	0	1	1
10	1	0	1	0	1
11	1	0	1	1	1
12	1	1	0	0	1
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	1

**Groups**

(0,1,2,3,4,5,6,7)	$\bar{A}$
(0,2,4,6,8,10,12,14)	$\bar{D}$
(2,3,6,7,10,11,14,15)	C
(4,5,6,7,12,13,14,15)	B

$y = A' + D' + C + B$

**Truth Table**

	A	B	C	D	Y
0	0	0	0	0	1
1	0	0	0	1	1
2	0	0	1	0	1
3	0	0	1	1	1
4	0	1	0	0	1
5	0	1	0	1	1
6	0	1	1	0	1
7	0	1	1	1	1
8	1	0	0	0	1
9	1	0	0	1	0
10	1	0	1	0	1
11	1	0	1	1	1
12	1	1	0	0	1
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	1

[illegible]