SUM of PRODUCTS

Map

	$\overline{D}.\overline{E}.\overline{F}$	$\overline{D}.\overline{E}.F$	$\overline{D}.E.F$	$\overline{D}.E.\overline{F}$	$D.\overline{E}.\overline{F}$	$D.\overline{E}.F$	$D.E.F$	$D.E.\overline{F}$
$\overline{A}.\overline{B}.\overline{C}$	0	0	x	x	0	0	0	0
$\overline{A}.\overline{B}.C$	0	0	1	1	0	1	1	1
$\overline{A}.B.C$	0	0	0	0	0	0	0	0
$\overline{A}.B.\overline{C}$	0	0	0	0	0	0	0	0
$A.\overline{B}.\overline{C}$	x	0	0	0	0	0	0	0
$A.\overline{B}.C$	0	0	0	0	0	0	0	0
$A.B.C$	0	0	0	0	0	0	0	0
$A.B.\overline{C}$	0	0	0	0	0	0	0	0

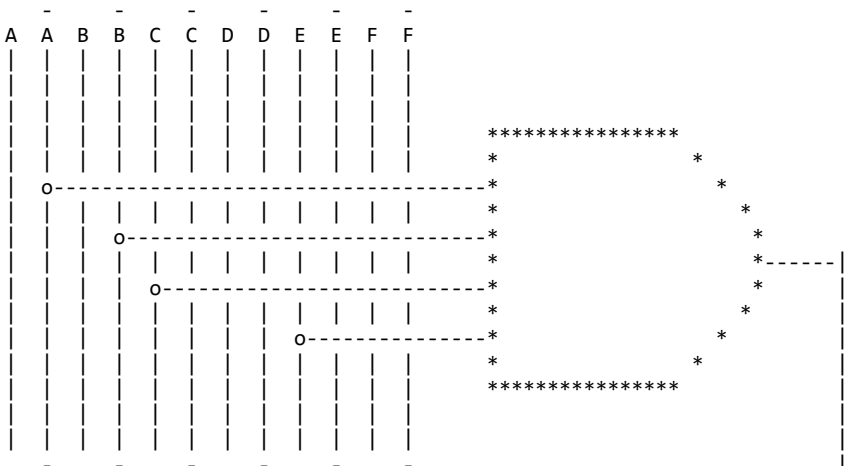
Map Layout

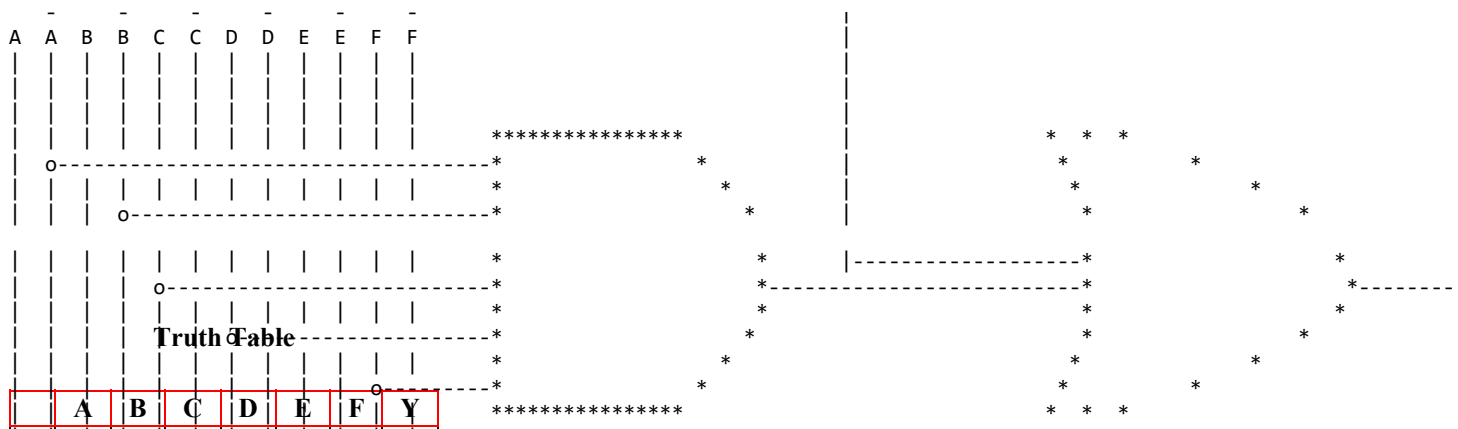
	$\overline{D}.\overline{E}.\overline{F}$	$\overline{D}.\overline{E}.F$	$\overline{D}.E.F$	$\overline{D}.E.\overline{F}$	$D.\overline{E}.\overline{F}$	$D.\overline{E}.F$	$D.E.F$	$D.E.\overline{F}$
$\overline{A}.\overline{B}.\overline{C}$	0	1	3	2	4	5	7	6
$\overline{A}.\overline{B}.C$	8	9	11	10	12	13	15	14
$\overline{A}.B.C$	24	25	27	26	28	29	31	30
$\overline{A}.B.\overline{C}$	16	17	19	18	20	21	23	22
$A.\overline{B}.\overline{C}$	32	33	35	34	36	37	39	38
$A.\overline{B}.C$	40	41	43	42	44	45	47	46
$A.B.C$	56	57	59	58	60	61	63	62
$A.B.\overline{C}$	48	49	51	50	52	53	55	54

Groups

(10,11,14,15)	$\overline{A}.\overline{B}.C.E$
(13,15)	$\overline{A}.\overline{B}.C.D.F$

$y = \overline{A}.\overline{B}.C.E + \overline{A}.\overline{B}.C.D.F$





Truth Table

	A	B	C	D	E	F	Y
0	0	0	0	0	0	0	0
1	0	0	0	0	0	1	0
2	0	0	0	0	1	0	x
3	0	0	0	0	1	1	x
4	0	0	0	1	0	0	0
5	0	0	0	1	0	1	0
6	0	0	0	1	1	0	0
7	0	0	0	1	1	1	0
8	0	0	1	0	0	0	0
9	0	0	1	0	0	1	0
10	0	0	1	0	1	0	1
11	0	0	1	0	1	1	1
12	0	0	1	1	0	0	0
13	0	0	1	1	0	1	1
14	0	0	1	1	1	0	1
15	0	0	1	1	1	1	1
16	0	1	0	0	0	0	0
17	0	1	0	0	0	1	0
18	0	1	0	0	1	0	0
19	0	1	0	0	1	1	0
20	0	1	0	1	0	0	0
21	0	1	0	1	0	1	0
22	0	1	0	1	1	0	0
23	0	1	0	1	1	1	0
24	0	1	1	0	0	0	0
25	0	1	1	0	0	1	0
26	0	1	1	0	1	0	0
27	0	1	1	0	1	1	0
28	0	1	1	1	0	0	0
29	0	1	1	1	0	1	0
30	0	1	1	1	1	0	0
31	0	1	1	1	1	1	0
32	1	0	0	0	0	0	x
33	1	0	0	0	0	1	0
34	1	0	0	0	1	0	0
35	1	0	0	0	1	1	0
36	1	0	0	1	0	0	0
37	1	0	0	1	0	1	0
38	1	0	0	1	1	0	0

39	1	0	0	1	1	1	0
40	1	0	1	0	0	0	0
41	1	0	1	0	0	1	0
42	1	0	1	0	1	0	0
43	1	0	1	0	1	1	0
44	1	0	1	1	0	0	0
45	1	0	1	1	0	1	0
46	1	0	1	1	1	0	0
47	1	0	1	1	1	1	0
48	1	1	0	0	0	0	0
49	1	1	0	0	0	1	0
50	1	1	0	0	1	0	0
51	1	1	0	0	1	1	0
52	1	1	0	1	0	0	0
53	1	1	0	1	0	1	0
54	1	1	0	1	1	0	0
55	1	1	0	1	1	1	0
56	1	1	1	0	0	0	0
57	1	1	1	0	0	1	0
58	1	1	1	0	1	0	0
59	1	1	1	0	1	1	0
60	1	1	1	1	0	0	0
61	1	1	1	1	0	1	0
62	1	1	1	1	1	0	0
63	1	1	1	1	1	1	0