

SUM of PRODUCTS

Map

	$\overline{D}\overline{E}\overline{F}$	$\overline{D}\overline{E}F$	$\overline{D}E\overline{F}$	$\overline{D}EF$	$D\overline{E}\overline{F}$	$D\overline{E}F$	$DE\overline{F}$	DEF
$\overline{A}\overline{B}\overline{C}$	0	0	x	x	0	0	0	0
$\overline{A}\overline{B}C$	0	0	1	1	1	0	1	0
$\overline{A}B\overline{C}$	0	0	0	0	0	0	0	0
$\overline{A}BC$	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
$AB\overline{C}$	0	0	0	0	0	0	0	0
ABC	0	0	0	0	0	0	0	0

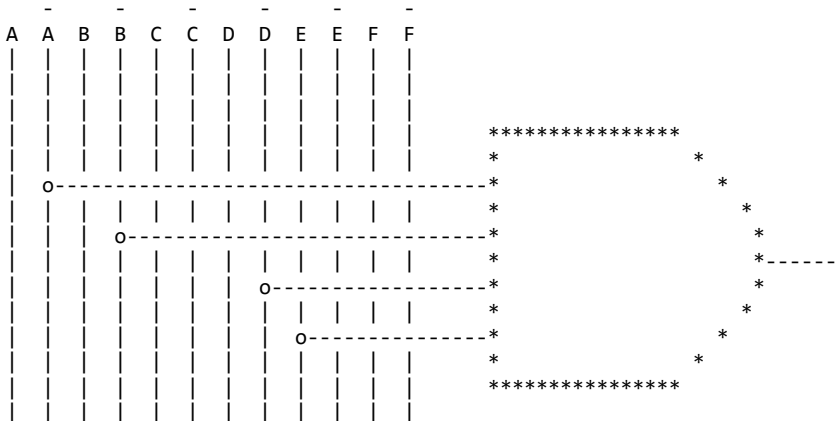
Map Layout

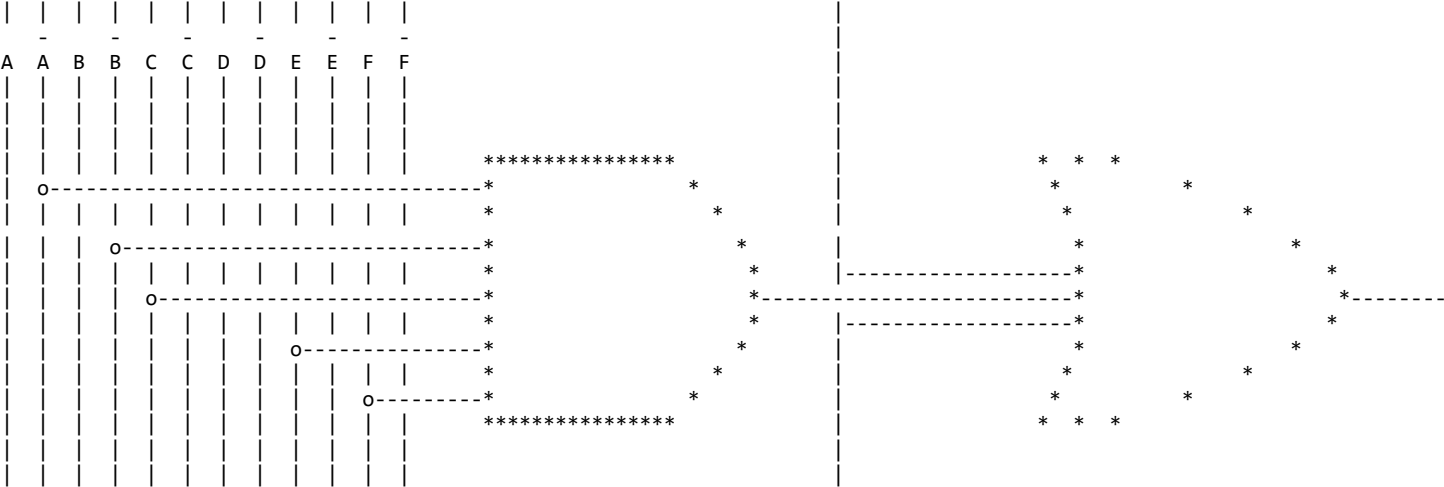
	$\overline{D}\overline{E}\overline{F}$	$\overline{D}\overline{E}F$	$\overline{D}E\overline{F}$	$\overline{D}EF$	$D\overline{E}\overline{F}$	$D\overline{E}F$	$DE\overline{F}$	DEF
$\overline{A}\overline{B}\overline{C}$	0	1	3	2	4	5	7	6
$\overline{A}\overline{B}C$	8	9	11	10	12	13	15	14
$\overline{A}B\overline{C}$	24	25	27	26	28	29	31	30
$\overline{A}BC$	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
$AB\overline{C}$	56	57	59	58	60	61	63	62
ABC	48	49	51	50	52	53	55	54

Groups

(2,3,10,11)	$\overline{A}\overline{B}\overline{D}E$
(11,15)	$\overline{A}\overline{B}C.E.F$
(12)	$\overline{A}\overline{B}.C.D.\overline{E}\overline{F}$

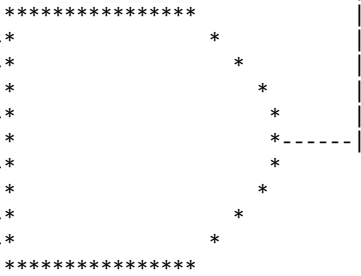
$$y = \overline{A}\overline{B}\overline{D}E + \overline{A}\overline{B}C.E.F + \overline{A}\overline{B}.C.D.\overline{E}\overline{F}$$





A	A	B	B	C	C	D	D	E	E	F	F
0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	1	0	0	0
2	0	0	0	0	0	1	0	0	x		
3	0	0	0	0	0	1	1	0	x		
4	0	0	0	1	0	0	0	0			
5	0	0	0	1	0	0	1	0			
6	0	0	0	1	1	0	0	0			
7	0	0	0	1	1	1	1	0			
8	0	0	1	0	0	0	0	0			
9	0	0	1	0	0	0	1	0			
10	0	0	1	0	1	0	0	1			
11	0	0	1	0	1	1	1	1			
12	0	0	1	1	0	0	0	1			
13	0	0	1	1	0	1	0	0			
14	0	0	1	1	1	0	0	0			
15	0	0	1	1	1	1	1	1			
16	0	1	0	0	0	0	0	0			
17	0	1	0	0	0	0	1	0			
18	0	1	0	0	1	0	0	0			
19	0	1	0	0	1	1	1	0			
20	0	1	0	1	0	0	0	0			
21	0	1	0	1	0	1	0	0			
22	0	1	0	1	1	0	0	0			
23	0	1	0	1	1	1	1	0			
24	0	1	1	0	0	0	0	0			
25	0	1	1	0	0	1	0	0			
26	0	1	1	0	1	0	0	0			

Truth Table



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