

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	0	0	0	0	0	0
$\overline{A}\overline{B}C$	1	0	0	0	0	0	0	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
$A\overline{B}\overline{C}$	1	1	1	1	1	1	1	1
$A\overline{B}C$	0	0	1	1	0	0	0	0
$AB\overline{C}$	0	0	0	0	0	0	0	0
ABC	0	0	0	0	0	0	0	0

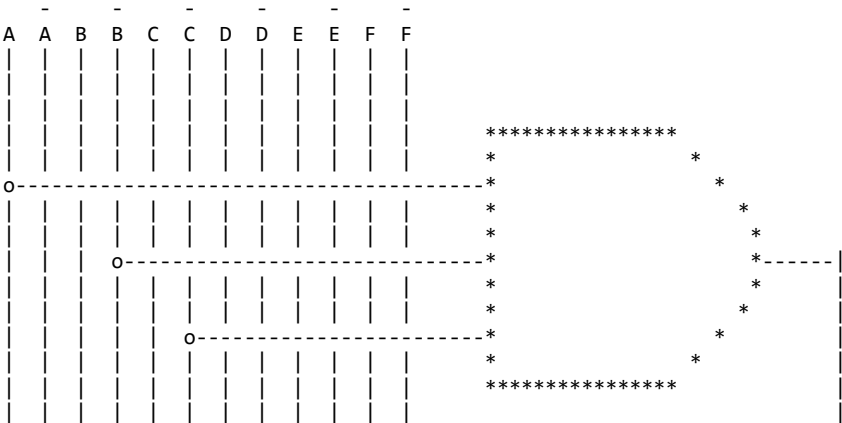
Map Layout

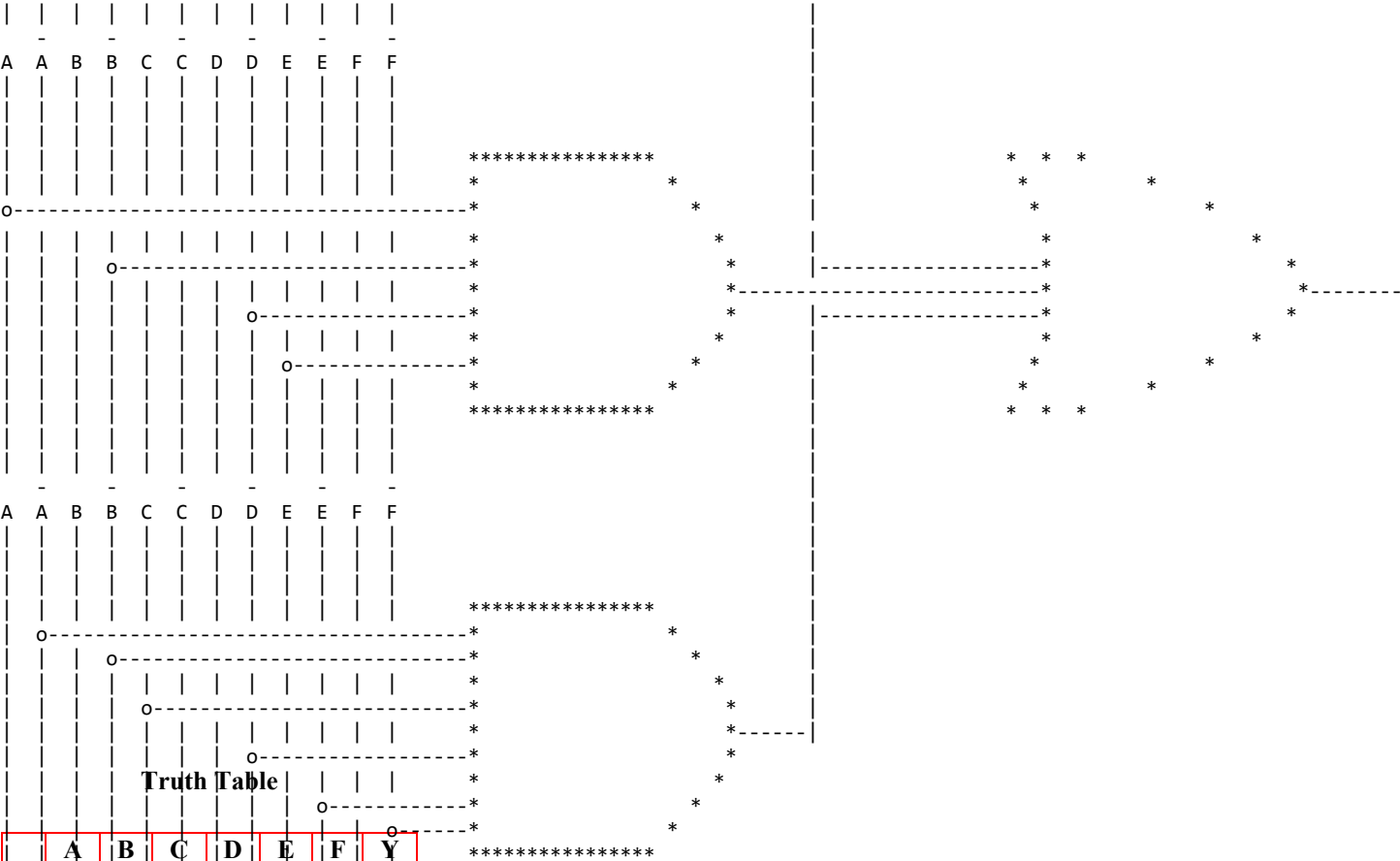
	$\overline{D}\overline{E}\overline{F}$	$\overline{D}\overline{E}F$	$\overline{D}E\overline{F}$	$\overline{D}EF$	$D\overline{E}\overline{F}$	$D\overline{E}F$	$DE\overline{F}$	DEF
$\overline{A}\overline{B}\overline{C}$	0	1	3	2	4	5	7	6
$\overline{A}\overline{B}C$	8	9	11	10	12	13	15	14
$\overline{A}B\overline{C}$	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

(32,33,34,35,36,37,38,39)	$A\overline{B}\overline{C}$
(34,35,42,43)	$A\overline{B}\overline{D}E$
(8)	$\overline{A}\overline{B}C\overline{D}\overline{E}\overline{F}$

y = A.B.C + A.B.D.E + A.B.C.D.E.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	0
3	0	0	0	0	1	1	0
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	1
9	0	0	1	0	0	1	0
10	0	0	1	0	1	0	0
11	0	0	1	0	1	1	0
12	0	0	1	1	0	0	0
13	0	0	1	1	0	1	0
14	0	0	1	1	1	0	0
15	0	0	1	1	1	1	0
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	1
33	1	0	0	0	0	1	1
34	1	0	0	0	1	0	1
35	1	0	0	0	1	1	1
36	1	0	0	1	0	0	1
37	1	0	0	1	0	1	1
38	1	0	0	1	1	0	1
39	1	0	0	1	1	1	1
40	1	0	1	0	0	0	0
41	1	0	1	0	0	1	0
42	1	0	1	0	1	0	1
43	1	0	1	0	1	1	1
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