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SUM of PRODUCTS

Map

	$\overline{\mathrm{C.D}}$	$\overline{\mathrm{C}}.\mathrm{D}$	C.D	$C.\overline{D}$
$\overline{A}.\overline{B}$	1	1	0	1
$\overline{\mathbf{A}}$.B	0	1	1	0
A.B	1	X	1	0
$A.\overline{B}$	0	1	X	1

Map Layout

	$\overline{\mathrm{C.D}}$	$\overline{\mathrm{C}}.\mathrm{D}$	C.D	$C.\overline{D}$
$\overline{A}.\overline{B}$	0	1	3	2
\overline{A} .B	4	5	7	6
A.B	12	13	15	14
$A.\overline{B}$	8	9	11	10

Groups

(1,5,9,13)	C.D
(5,7,13,15)	B.D
(0,1)	A.B.C
(2,10)	B.C.D
(12,13)	$A.B.\overline{C}$

$$y = C'D + BD + A'B'C' + B'CD' + ABC'$$

$$\overline{A}$$
 \overline{A} \overline{B} \overline{B} \overline{C} \overline{C} \overline{D}

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\overline{A} \overline{A} \overline{B} \overline{B} \overline{C} \overline{C} \overline{D}

5/1/22, 7:31 PM _____A-B-C-D____m_0-1-2-5-7-9-10-12-15____d_11-13____option-0____889788865579857292705

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 \overline{A} \overline{B} \overline{B} \overline{C} \overline{C} \overline{D}

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 \overline{A} \overline{B} \overline{B} \overline{C} \overline{C} \overline{D}

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 \overline{A} \overline{B} \overline{B} \overline{C} \overline{C} \overline{D}

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Truth Table

	A	В	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	0
4	0	1	0	0	0
5	0	1	0	1	1
6	0	1	1	0	0
7	0	1	1	1	1
8	1	0	0	0	0
9	1	0	0	1	1
10	1	0	1	0	1
11	1	0	1	1	X
12	1	1	0	0	1

5/1/22, 7:31 PM _____A-B-C-D____m_0-1-2-5-7-9-10-12-15____d_11-13____option-0____889788865579857292705

 13
 1
 1
 0
 1
 x

 14
 1
 1
 1
 0
 0

 15
 1
 1
 1
 1
 1

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