

A	B	C	D	F
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	0
1	0	0	1	1
1	0	1	0	1
1	0	1	1	0
1	1	0	0	1
1	1	0	1	0
1	1	1	0	0
1	1	1	1	1

Sum of minterms:

$$A'B'C'D + A'B'CD + A'BC'D + A'BCD' + A'BC'D + A'BCD' + ABC'D' + ABCD$$

AB \ CD	00	01	11	10
00	1		1	
01		1		1
11	1		1	
10		1		1

This equation can not simplify.

Product of maxterms

$$(A+B+C+D'). (A+B+C'+D). (A+B'+C+D) + (A+B'+C'+D') \cdot (A'+B+C+D) + (A'+B+C'+D) \cdot (A'+B'+C+D') \cdot (A'+B'+C'+D)$$

