A	B	¬B	D	A∨B	¬B∧(A∨B)	(¬B∧A)∨D	≡ ¬B∧A	1(A∨B)	F= A∧¬B	V	F= B∧D
0	0	1	0	0	0	0		0	0	0	0
0	0	1	1	0	0	1		0	0		0
0	1	0	0	1	0	0		0	0	0	0
0	1	0	1	1	0	1		1	0	1 ①	1
1	0	1	0	1	1	1		1	1	1 ②	0
1	0	1	1	1	1	1		1	1	1 ③	0
1	1	0	0	1	0	0		0	0	0	0
1	1	0	1	1	0	1		0	0	1 ④	1

A Karnaugh Map can be used for simplification as follows:

D \ AB	$\overline{A}\overline{B}$ (00)	$\overline{A}B$ (01)	AB (11)	$A\overline{B}$ (10)
$\overline{D}$	0	0	0	1 ②
D	1	0	1 ①	1 ④ 1 ③

$$F = (A \wedge \neg B) \vee (D \wedge B)$$

KIE 21.04.2014