Mapy Karnaugh: A, B, C, D cyfry BCD

1) Dla a_1:

$a = a_1 = A + C + D \cdot B + \bar{D} \cdot \bar{B}$

AB \ CD	00	01	11	10
00	1	0	1	1
01	0	1	1	1
11	x	x	x	x
10	1	1	x	x

2) Dla a_2:

$b = a_2 = \bar{B} + \bar{D} \cdot \bar{C} + D \cdot C$

AB \ CD	00	01	11	10
00	1	1	1	1
01	1	0	1	0
11	x	x	x	x
10	1	1	x	x

Analogicznie dla pozostałych otrzymamy:

$c = a_3 = \bar{C} + D + B$

$d = a_4 = A + \bar{D} \cdot C + C \cdot \bar{B} + D \cdot \bar{C} \cdot B + \bar{D} \cdot \bar{B}$

$e = a_5 = \bar{D} \cdot C + \bar{D} \cdot \bar{B}$

$f = a_6 = \bar{D} \cdot \bar{C} + B + A$

$g = a_7 = \bar{C} \cdot B + A + \bar{D} \cdot C + C \cdot \bar{B}$