

## 2. Минимизация булевых функций

$C_1$

$a_3 a_4 \backslash a_1 a_2$	00	01	11	10
00			1	1
01			1	1
11		1		1
10			1	1

$y=0$

$b_1 b_2 \backslash a_1 a_2$	00	01	11	10
00				
01		1		
11	1	1	1	1
10	1	1		

$$C_{\min}(C_1) = \{10xx0, 1x0x0, 1x1x0, 0111x, 0x1x1, 00x11, x0111\}$$

$$s^a = 24, s^b = 31$$

$C_2$

$a_3 a_4 \backslash a_1 a_2$	00	01	11	10
00		1	1	
01		1	1	
11	1			1
10		1	1	

$y=0$

$b_1 b_2 \backslash a_1 a_2$	00	01	11	10
00				
01		1		
11	1	1	1	1
10	1	1		

$y=1$

$$C_{\min}(C_2) = \{x10x0, x1x00, x0110, x0111, 0x1x1, 00x11\}$$

$$s^a = 21, s^b = 27$$