

9. $f^4(x) = \&(0, 2, 7, 11, 12, 14, 15)$

пишем карту Карно:

		$x_1 x_2$			
		00	01	11	10
$x_3 x_4$	00	0			
	01				
	11	0	0	0	0
	10	0		0	

\Rightarrow

		$x_1 x_2$			
		00	01	11	10
$x_2 x_3$	00		1	1	1
	01	1	1	1	1
	11				
	10		1		1

$$C_{min}(f) = \begin{cases} x x 0 1 \\ \cancel{0 x x 1} \quad \cancel{x x 1} \quad x 1 0 x \\ \cancel{0 x 1 x} \quad 1 x 0 x \\ 0 1 x 0 \\ 1 0 x 0 \end{cases}$$

МДНФ, имеем бул:

$$f = \bar{x}_3 x_4 \vee x_2 \bar{x}_3 \vee x_1 \bar{x}_3 \vee \bar{x}_1 x_2 \bar{x}_4 \vee \bar{x}_1 \bar{x}_3 \bar{x}_4 \vee x_1 \bar{x}_2 \bar{x}_4$$