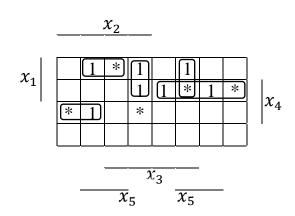
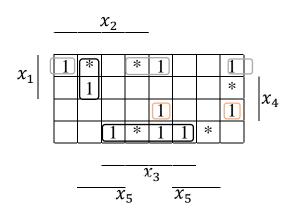
a)



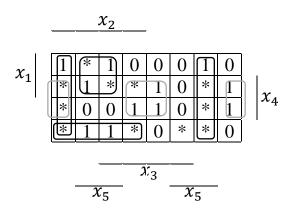
$$f = \overline{x_1} x_2 \overline{x_3} x_4 + x_1 \overline{x_2} x_4 + x_1 x_2 \overline{x_4} x_5 + x_1 x_2 x_3 \overline{x_5} + x_1 \overline{x_2} x_3 x_5$$

б)

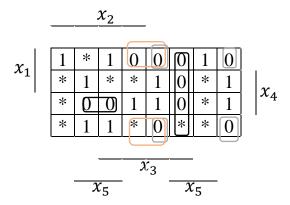


$$f = \overline{x_1}x_3\overline{x_4} + \overline{x_1}\overline{x_2}x_4\overline{x_5} + x_1x_2\overline{x_3}x_5 + x_1\overline{x_4}\overline{x_5}$$

б)

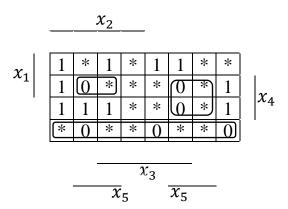


 $f_{\mathrm{д}\mathrm{H}\varphi} = x_4\overline{x_5} + \overline{x_1}x_2\overline{x_4} + x_2\overline{x_3}\overline{x_5} + x_1x_2x_5 + \overline{x_2}\overline{x_3}x_5$



 $f_{\text{кн}\Phi} = x_3 \overline{x_4 x_5} + \overline{x_2 x_4 x_5} + \overline{x_2} x_3 x_5 + \overline{x_1} x_2 x_4 x_5$

в)



 $f_{\text{KH}} = \overline{x_1 x_4} + x_1 x_2 x_4 x_5 + \overline{x_2} x_4 x_5$