

x_1x_2

x_3x_4

$g(x_1, x_2, x_3, x_4)$

	00	01	11	10
00	1	0	0	0
01	1	0	1	0
11	0	0	1	1
10	0	0	0	1

The Karnaugh map shows the function $g(x_1, x_2, x_3, x_4)$ with the following prime implicants highlighted:

- Purple group (top-left): x_3x_4
- Orange group (middle-right): x_1x_2
- Blue group (bottom-right): x_3x_4
- Blue group (middle-right): x_1x_2