

Diagram illustrating a 4x4 Karnaugh map for a function of four variables,  $x_1, x_2, x_3, x_4$ .

The map is labeled with  $x_1x_2$  for the columns and  $x_3x_4$  for the rows.

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

The map shows the following groupings (circled cells):

- Group 1: Cells (00, 00), (00, 10), (10, 00), (10, 10) - A 2x2 square group.
- Group 2: Cells (00, 00), (00, 01), (00, 10), (00, 11) - A 4-cell group.
- Group 3: Cells (00, 00), (01, 00), (00, 01), (01, 01) - A 4-cell group.
- Group 4: Cells (00, 00), (00, 01), (00, 10), (00, 11) - A 4-cell group.
- Group 5: Cells (00, 00), (00, 01), (00, 10), (00, 11) - A 4-cell group.
- Group 6: Cells (00, 00), (00, 01), (00, 10), (00, 11) - A 4-cell group.