

| $x_1$ | $x_2$ | $x_3$ | $x_1 \cdot x_2 \cdot x_3$ | $x_1 + x_2 + x_3$ |
|-------|-------|-------|---------------------------|-------------------|
| 0     | 0     | 0     | 0                         | 0                 |
| 0     | 0     | 1     | 0                         | 1                 |
| 0     | 1     | 0     | 0                         | 1                 |
| 0     | 1     | 1     | 0                         | 1                 |
| 1     | 0     | 0     | 0                         | 1                 |
| 1     | 0     | 1     | 0                         | 1                 |
| 1     | 1     | 0     | 0                         | 1                 |
| 1     | 1     | 1     | 1                         | 1                 |

**Figure 2.7** Three-input AND and OR operations.