# KARNAUGH

| A | B | C | O |
|---|---|---|---|
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 0 |
| 0 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 |
| 1 | 0 | 1 | 1 |
| 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 |

$\bar{A}\ \bar{B}\ \bar{C}$
$\bar{A}\ \bar{B}\ C$
$\bar{A}\ B\ \bar{C}$
$\bar{A}\ B\ C$
$A\ \bar{B}\ \bar{C}$
$A\ \bar{B}\ C$
$A\ B\ \bar{C}$
$A\ B\ C$
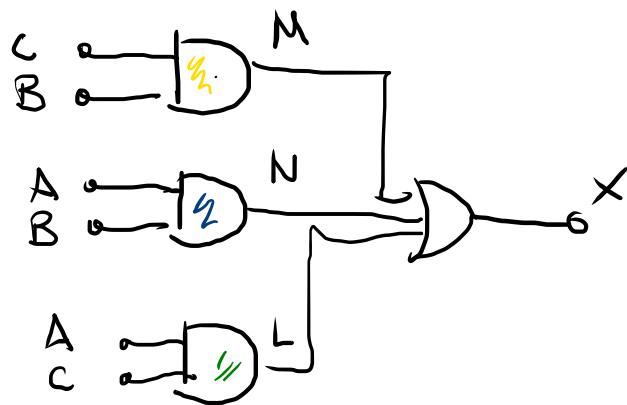
|  | C | $\bar{C}$ |
|---|---|---|
| $\bar{A}\bar{B}$ | 0 | 0 |
| $\bar{A}B$ | 1 | 0 |
| $AB$ | 1 | 1 |
| $A\bar{B}$ | 1 | 0 |

$X = CB + AB + AC$



## SOP
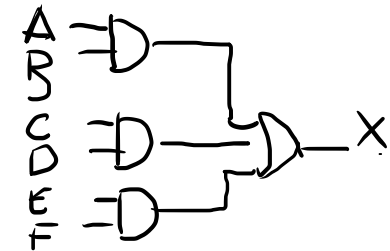


$X = AB + CD + EF$

| A | B | C | M | N | L |  |
|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 0 | 1 | 1 | 1 | 0 | 0 | 1 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 0 | 1 | 0 | 0 | 1 | 1 |
| 1 | 1 | 0 | 0 | 1 | 0 | 1 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 |