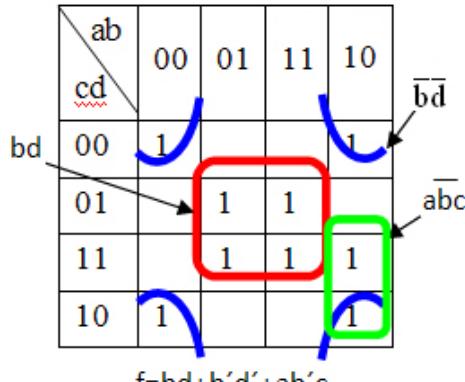


# SIMPLIFICACIÓN MEDIANTE EL MÉTODO DE KARNAUGH

## EJERCICIO RESUELTO:

| ABCD | F |
|------|---|
| 0000 | 1 |
| 0001 | 0 |
| 0010 | 1 |
| 0011 | 0 |
| 0100 | 0 |
| 0101 | 1 |
| 0110 | 0 |
| 0111 | 1 |
| 1000 | 1 |
| 1001 | 0 |
| 1010 | 1 |
| 1011 | 1 |
| 1100 | 0 |
| 1101 | 1 |
| 1110 | 0 |
| 1111 | 1 |



$$f = bd + \overline{b}\overline{d} + \overline{a}\overline{b}$$

La negación se puede representar de dos formas:  
Con un apóstrofe ( $A'$ ) o con una raya encima de la variable ( $\bar{A}$ ).

## EJERCICIOS PROPUESTOS:

A)

Tabla de verdad

| ABC | F |
|-----|---|
| 000 | 1 |
| 001 | 0 |
| 010 | 1 |
| 011 | 0 |
| 100 | 1 |
| 101 | 0 |
| 110 | 1 |
| 111 | 0 |

| C\AB | 00 | 01 | 11 | 10 |
|------|----|----|----|----|
| 0    | 1  | 1  | 1  | 1  |
| 1    | 0  | 0  | 0  | 0  |

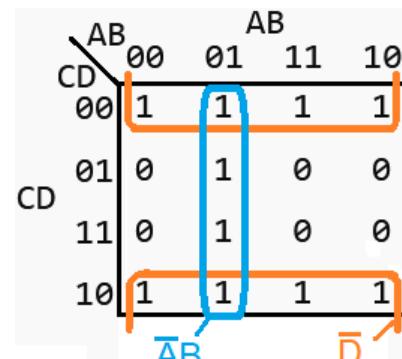
$$F = \overline{C}$$

| BC\A | 00 | 01 | 11 | 10 |
|------|----|----|----|----|
| 0    | 1  | 0  | 0  | 1  |
| 1    | 1  | 0  | 0  | 1  |

B)

Tabla de verdad

| ABCD | F |
|------|---|
| 0000 | 1 |
| 0001 | 0 |
| 0010 | 1 |
| 0011 | 0 |
| 0100 | 1 |
| 0101 | 1 |
| 0110 | 1 |
| 0111 | 1 |
| 1000 | 1 |
| 1001 | 0 |
| 1010 | 1 |
| 1011 | 0 |
| 1100 | 1 |
| 1101 | 0 |
| 1110 | 1 |
| 1111 | 0 |



$$F = \overline{A}B + \overline{D}$$

