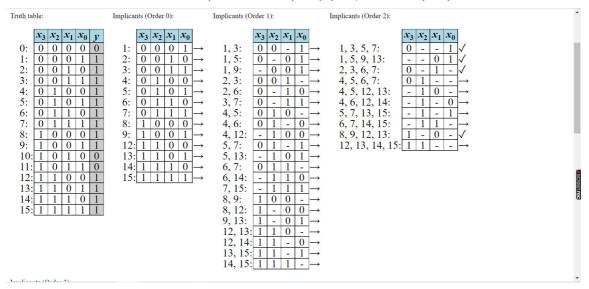
## Forme normale minimale: exemplu

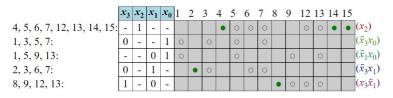
Se consideră tabelul de adevăr al formulei și se consideră implicanții primi, cărora li se aplică procedura de reducere:



Apoi urmează până nu se mai pot reduce:

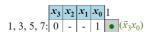


Prime implicant chart:



Extracted essential prime implicants:  $(\bar{x}_3x_1)$ ,  $(x_2)$ ,  $(x_3\bar{x}_1)$ 

Reduced prime implicant chart (Iteration 0):



După care extragem o submulțime minimală:

Extracted essential prime implicants:  $(\bar{x}_3x_1)$ ,  $(x_2)$ ,  $(x_3\bar{x}_1)$ 

Reduced prime implicant chart (Iteration 0):

$$\begin{bmatrix} x_3 & x_2 & x_1 & x_0 \\ 1, 3, 5, 7 & 0 & - & - & 1 & \bullet & (\bar{x}_3 x_0) \end{bmatrix}$$

Extracted essential prime implicants:  $(\bar{x}_3x_0)$ 

## Minimal boolean expression:

$$y = (\bar{x}_3 x_1) \lor (x_2) \lor (x_3 \bar{x}_1) \lor (\bar{x}_3 x_0)$$

## Legend:

Don't-care: ×

Implicant (non prime):  $\rightarrow$ 

Prime implicant: ✓

Essential prime implicant: •

Prime implicant but covers only don't-care: (×)