The set of our maximal monoms is:

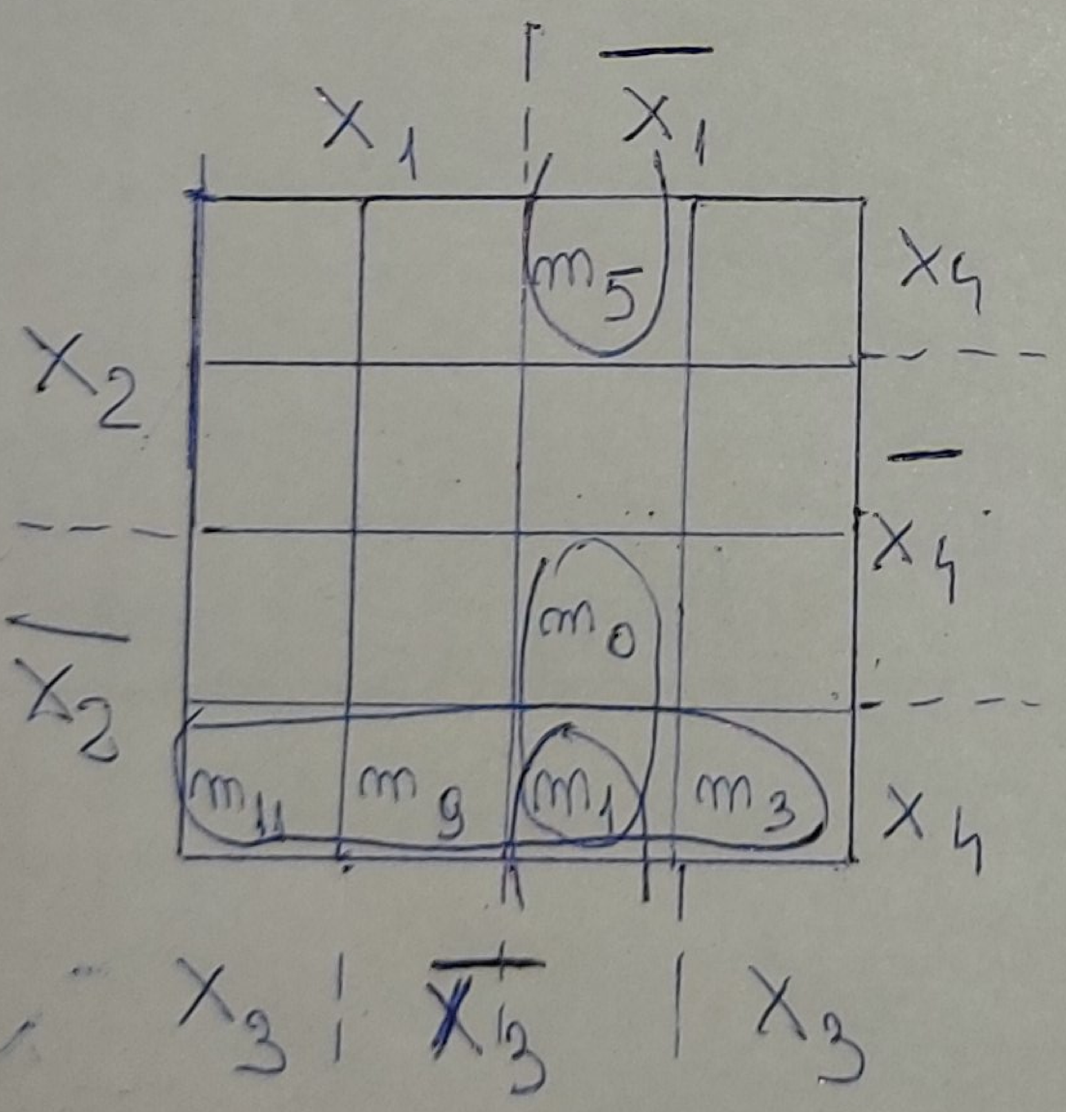
$M(f) = \{max_1, max_2, max_3\}$

- $max_1 = m_1 \vee m_3 \vee m_{11} = x_4 \bar{x}_2$ (double factorization)
- $max_2 = m_0 \vee m_1 = \bar{x}_1 \bar{x}_2 \bar{x}_3$ (simple factorization)
- $max_3 = m_1 \vee m_5 = \bar{x}_1 \bar{x}_3 x_4$ (simple factorization)

All maximal monoms are central monoms, because each maximal monom contains (at least) a minterm circled once. Thus, we will use the first case of the simplification algorithm.

There is a unique ~~an~~ simplified form of f, obtained as the disjunction of all central monoms:

$$f^S = max_1 \vee max_2 \vee max_3 = \bar{x}_2 x_4 \vee \bar{x}_1 \bar{x}_2 \bar{x}_3 \vee \bar{x}_1 \bar{x}_3 x_4$$




X_1
X_2
X_3
X_4
$\overline{X_2} X_4$
$\overline{X_1}\,\overline{X_2}\,\overline{X_3}$
$\overline{X_1}\,\overline{X_3} X_4$
$f(X_1, X_2, X_3, X_4)$