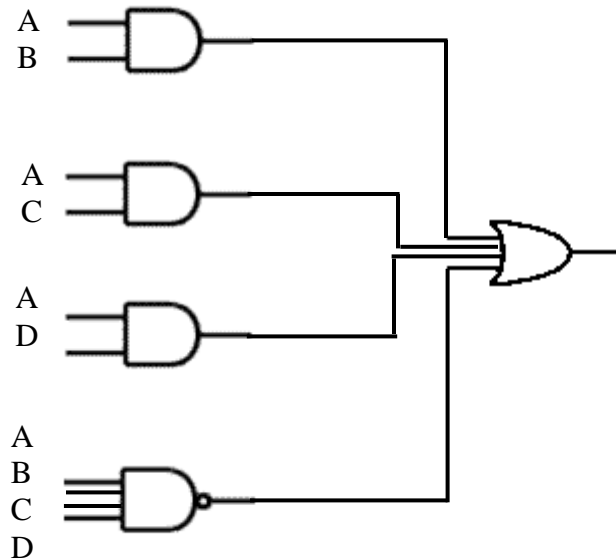
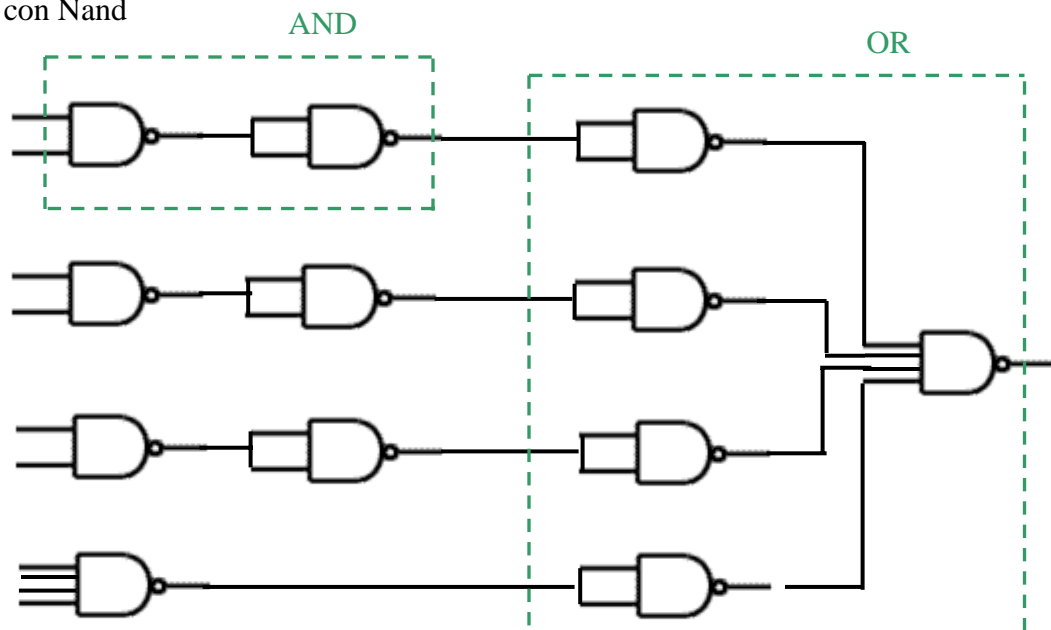


5) a)  $F = A.B + A.C + A.D + \overline{A.B.C.D}$



Sólo con Nand

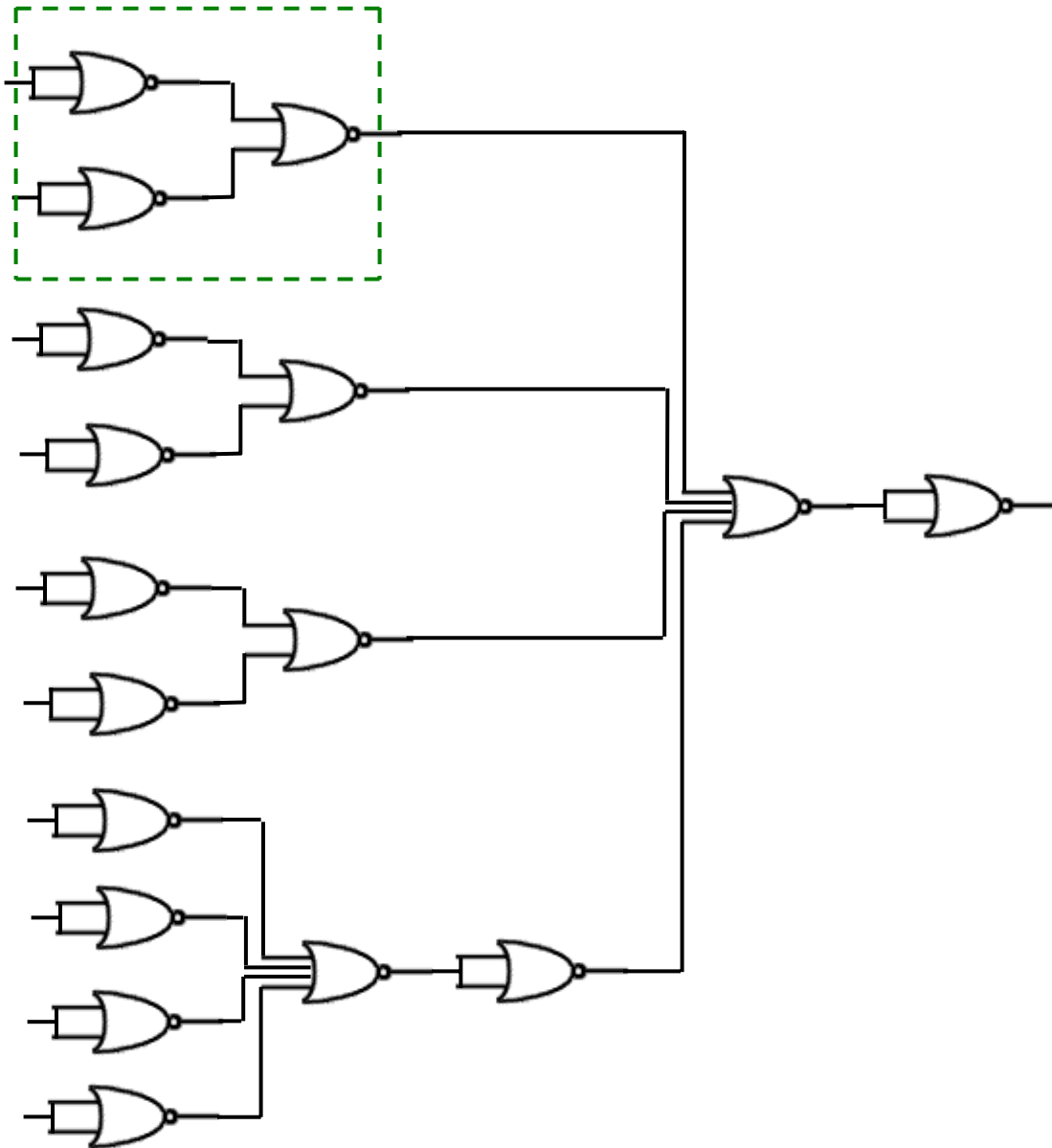


$$F = \overline{\overline{A.B}} + \overline{\overline{A.C}} + \overline{\overline{A.D}} + \overline{\overline{A.B.C.D}} = \overline{\overline{A.B}} + \overline{\overline{A.C}} + \overline{\overline{A.D}} + \overline{\overline{A.B.C.D}} =$$

$$= \overline{\overline{A.B}} \cdot \overline{\overline{A.C}} \cdot \overline{\overline{A.D}} \cdot \overline{\overline{A.B.C.D}} = \overline{\overline{A.B}} \cdot \overline{\overline{A.C}} \cdot \overline{\overline{A.D}} \cdot \overline{\overline{A.B.C.D}}$$

Sólo con Nor

AND



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

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

b)  $F = A + B + C + D = \overline{\overline{A} \cdot \overline{B} \cdot \overline{C} \cdot \overline{D}}$

