

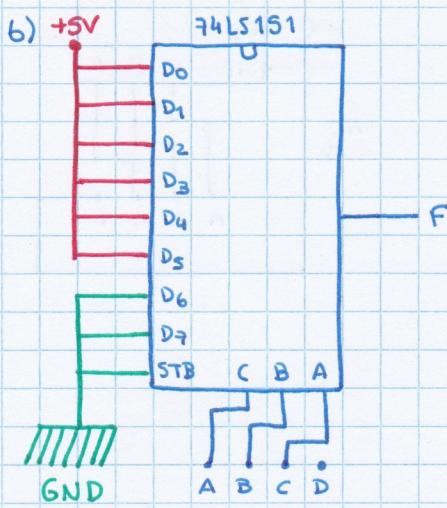
$$\begin{aligned}
 F &= (\overline{AB} \cdot \overline{CD} + D) \cdot \overline{AB} \\
 &= (\overline{AB} + \overline{CD} + D) \cdot \overline{AB} \\
 &= (AB + (\overline{C} + \overline{D}) + D) \cdot \overline{AB} \\
 &= (AB + \overline{C} + 1) \cdot \overline{AB} \\
 &= 1 \cdot \overline{AB} \\
 &= \overline{AB} \\
 &= \underline{\underline{A + B}}
 \end{aligned}$$

A	B	C	D	F
0	0	0	0	1
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	1
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

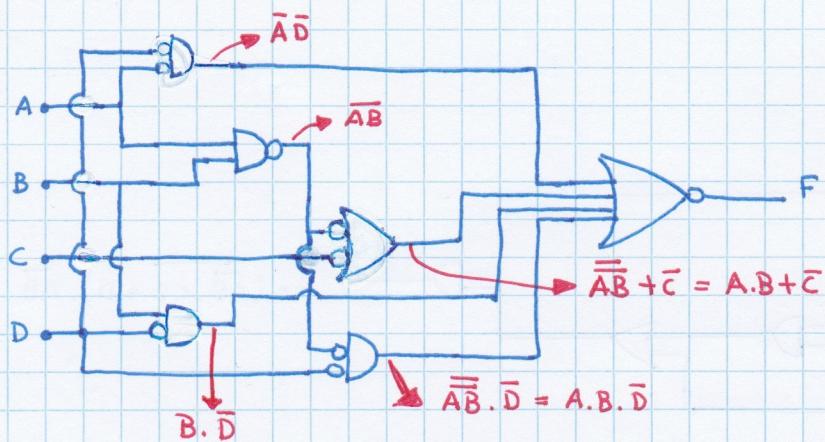
B	C	D	F
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	\bar{A}
1	0	1	\bar{A}
1	1	0	\bar{A}
1	1	1	\bar{A}

A	C	D	F
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	\bar{B}
1	0	1	\bar{B}
1	1	0	\bar{B}
1	1	1	\bar{B}

A	B	C	F
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	0
1	1	1	0



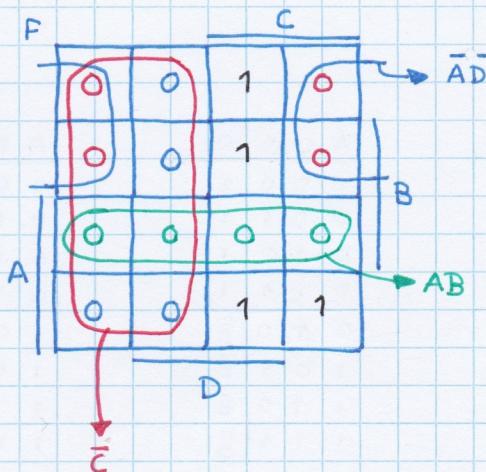
37)



$$a) \bar{F} = \overline{(\bar{A} \cdot \bar{D}) + (A \cdot B + \bar{C}) + (B \cdot \bar{D}) + (A \cdot B \cdot \bar{D})}$$

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

← coloca-se a zero porque F está negado



$$F = \bar{C} + \bar{A}\bar{D} + AB$$

$$F = C \cdot (A+D) \cdot (\bar{A}+\bar{B})$$

A	B	C	D	F
0	0	0	0	0
0	0	0	1	0
0	0	1	0	0
0	0	1	1	1
0	1	0	0	0
0	1	0	1	0
0	1	1	0	0
0	1	1	1	1
1	0	0	0	0
1	0	0	1	0
1	0	1	0	1
1	0	1	1	1
1	1	0	0	0
1	1	0	1	0
1	1	1	0	0
1	1	1	1	0

A	B	C	F
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	0

