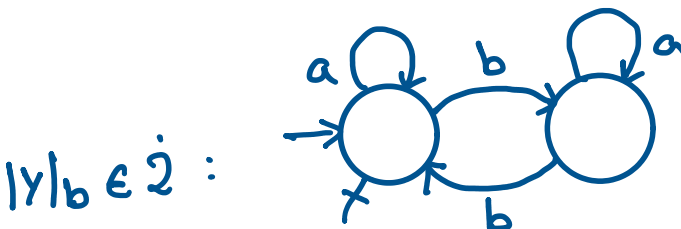
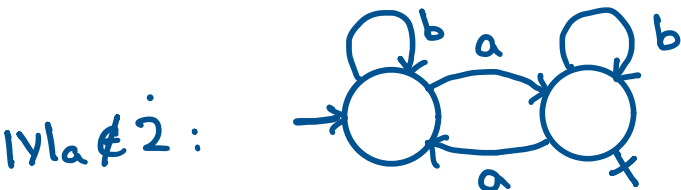
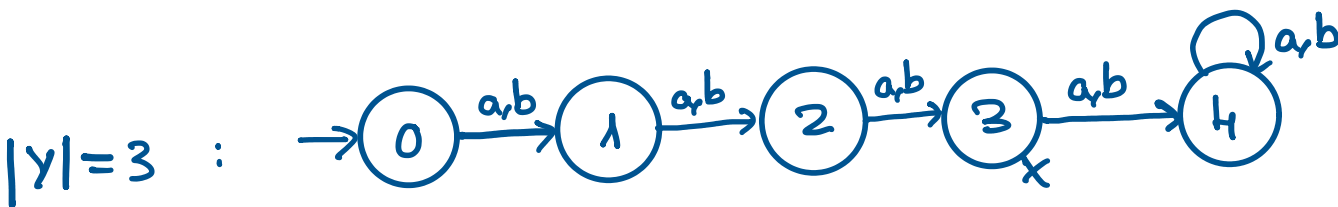
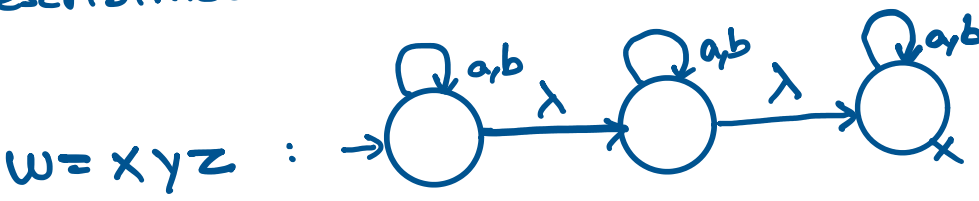


$\forall x,y,z : (w=xyz \wedge |y|=3) \Rightarrow (|y|_a \in 2 \vee |y|_b \notin 2)$

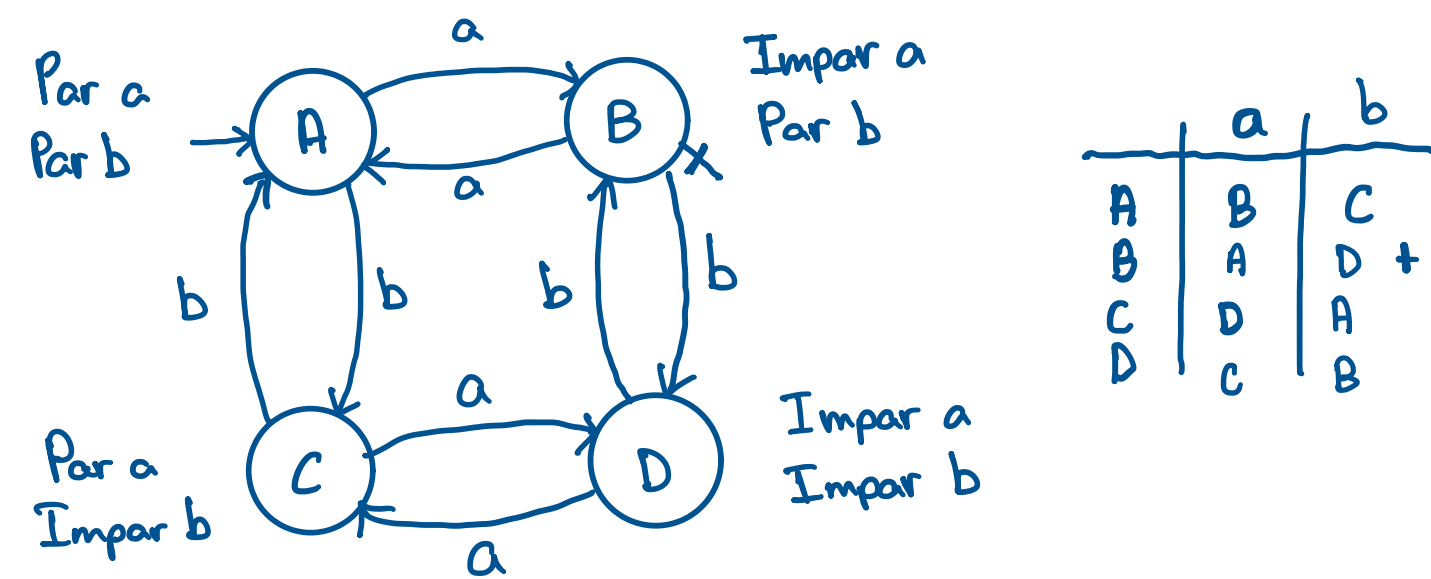
1- Aplicamos el complementario

$\neg \forall x,y,z : (w=xyz \wedge |y|=3) \Rightarrow (|y|_a \in 2 \vee |y|_b \notin 2) \equiv$
 $\equiv \exists x,y,z : \neg (w=xyz \wedge |y|=3) \Rightarrow (|y|_a \in 2 \vee |y|_b \notin 2) \equiv$
 $\equiv \exists x,y,z : (w=xyz \wedge |y|=3) \wedge \neg (|y|_a \in 2 \vee |y|_b \notin 2) \equiv$
 $\equiv \exists x,y,z : (w=xyz \wedge |y|=3) \wedge (|y|_a \notin 2 \wedge |y|_b \in 2) \equiv$
 $\equiv \exists x,y,z : (w=xyz \wedge |y|=3 \wedge |y|_a \notin 2 \wedge |y|_b \in 2)$

2- Describimos los autómatas por separado

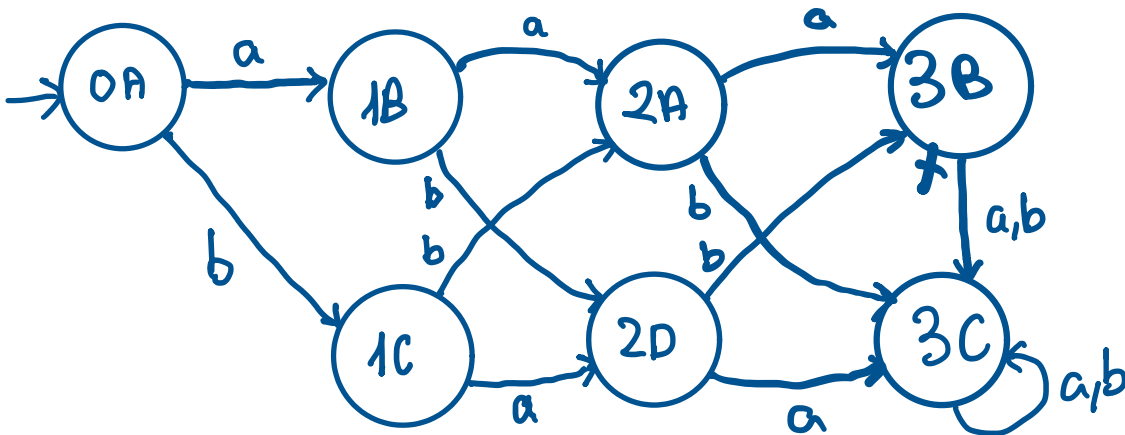
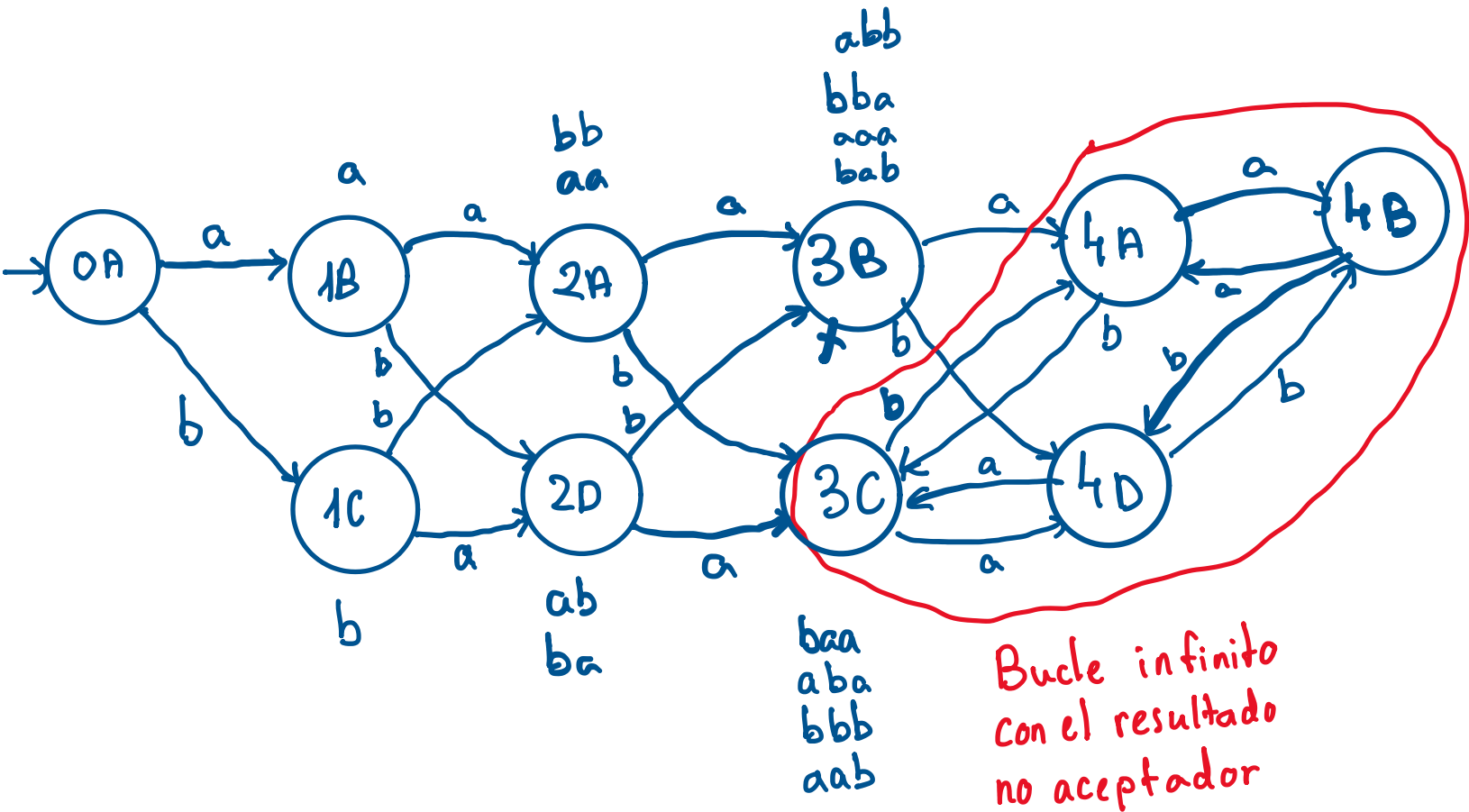


3- Intersectamos $L_1 = |y|_a \notin 2$ $L_2 = |y|_b \in 2$ $L_3 = L_1 \cap L_2$

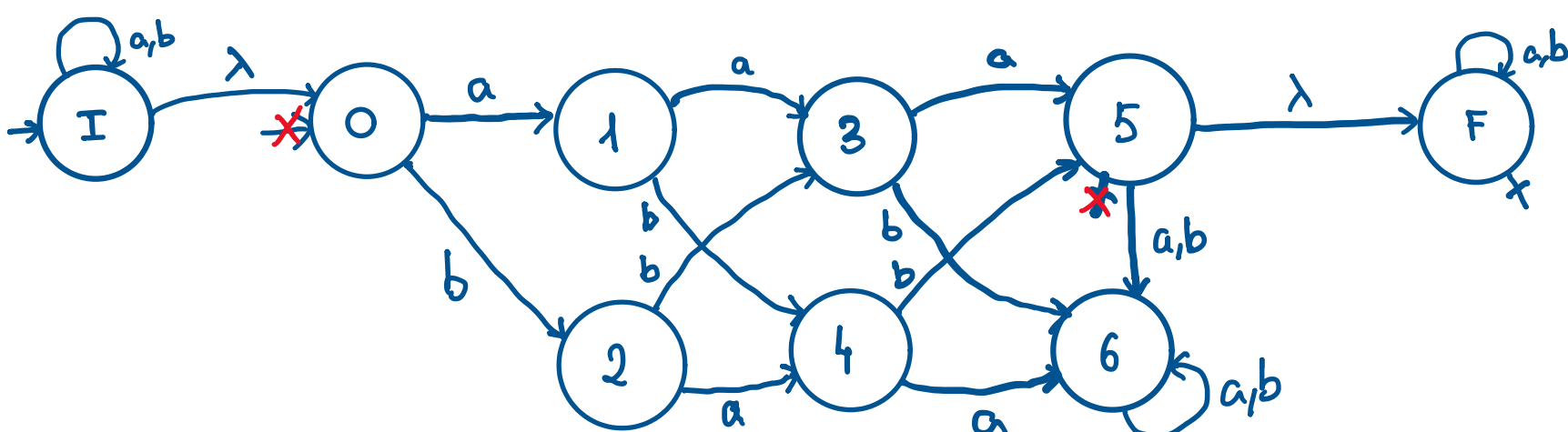


4- Intersectamos $L_4 = |y|=3$ $L_5 = L_3 \cap L_4$

	a	b
0A	1B	1C
1B	2A	2D
1C	2D	2A
2A	3B	3C
2D	3C	3B
3B	4A	4D +
3C	4D	4A
4A	4B	4C 3C
4D	4C 3C	4B
4B	4A	4D
4C	4D	4A



5- Concatenamos $\{x\} \cdot L_5 \cdot \{z\}$



λ -NFA \rightarrow NFA

q	$\lambda(q)$	a	b
I	I, O	I, 1	I, 2
O	O	1	2
1	1	3	4
2	2	4	3
3	3	5	6
4	4	6	5
5	5, F	6F	6F
6	6	6	6
F	F	F	F

	a	b
I, O	I, 1	I, 2
I, 1	I, 3	I, 4
I, 2	I, 4	I, 3
I, 3	I, 5	I, 6
I, 4	I, 6	I, 5
I, 5	I, 6F	I, 6F +
I, 6	I, 6	I, 6
I, 6F	I, 6F	I, 6F +