

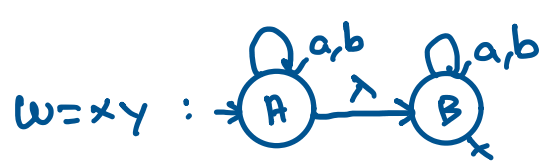
$$\forall x,y : ((w=xy \wedge |x| \geq 3) \Rightarrow (|x|_a \in 2 \vee |x|_b \notin 2))$$

1- Aplicamos el complementario

$$\neg \forall x,y : ((w=xy \wedge |x| \geq 3) \Rightarrow (|x|_a \in 2 \vee |x|_b \notin 2)) \equiv \neg \forall x : p(x) \equiv \exists x : \neg p(x)$$
$$\equiv \exists x,y : \neg ((w=xy \wedge |x| \geq 3) \Rightarrow (|x|_a \in 2 \vee |x|_b \notin 2)) \equiv \neg (p \rightarrow q) \equiv p \wedge \neg q$$
$$\equiv \exists x,y : ((w=xy \wedge |x| \geq 3) \wedge \neg (|x|_a \in 2 \vee |x|_b \notin 2)) \equiv \neg (p \vee q) \equiv \neg p \wedge \neg q$$
$$\equiv \exists x,y : ((w=xy \wedge |x| \geq 3) \wedge (|x|_a \notin 2 \wedge |x|_b \in 2)) \equiv$$
$$\equiv \exists x,y : (w=xy \wedge |x| \geq 3 \wedge |x|_a \notin 2 \wedge |x|_b \in 2)$$

propiedad asociativa

2- Describimos los autómatas por separado

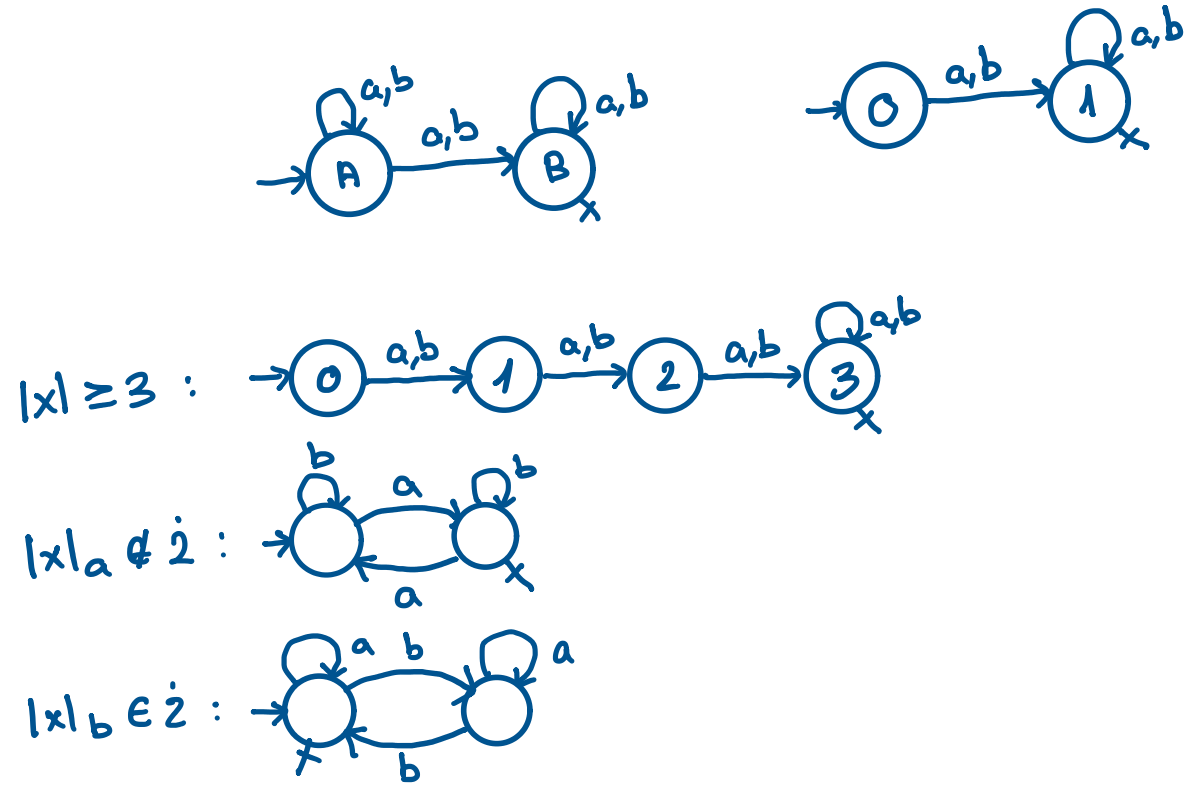


λ -NFA \rightarrow NFA

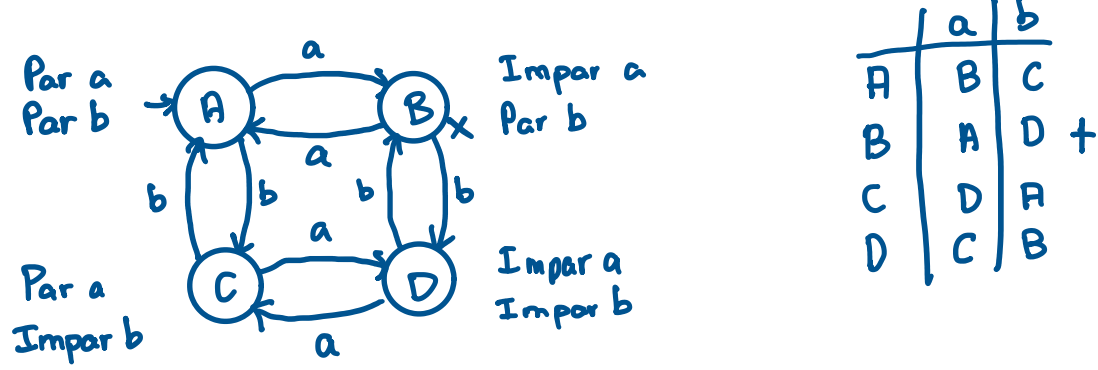
q	$\Lambda(q)$	a	b
A	A, B	AB	AB
B	B	B	B

NFA \rightarrow DFA

	a	b
0	A	AB
1	AB	AB

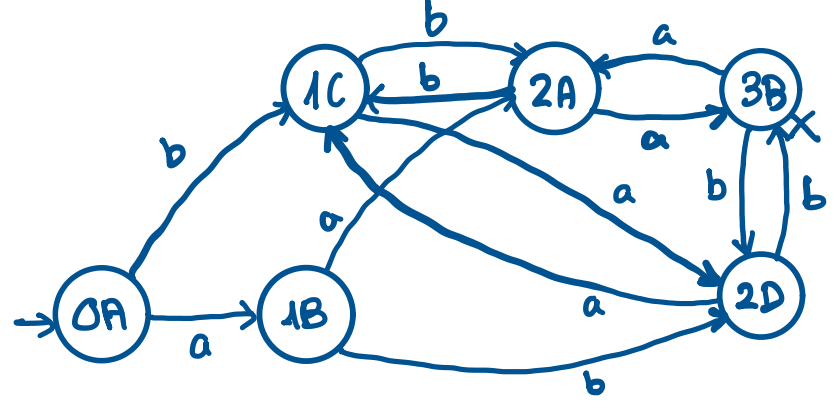


3 - Intersectamos $|x|_a \notin 2 \wedge |x|_b \in 2$

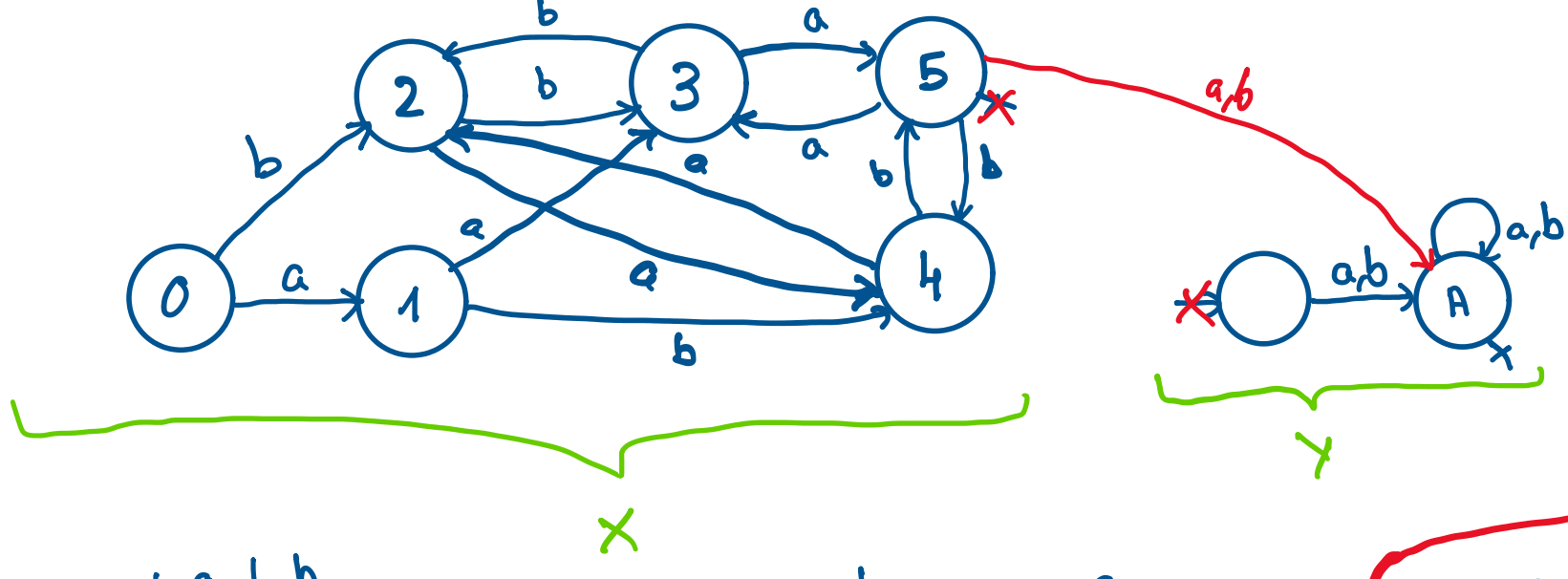


4 - Intersectamos

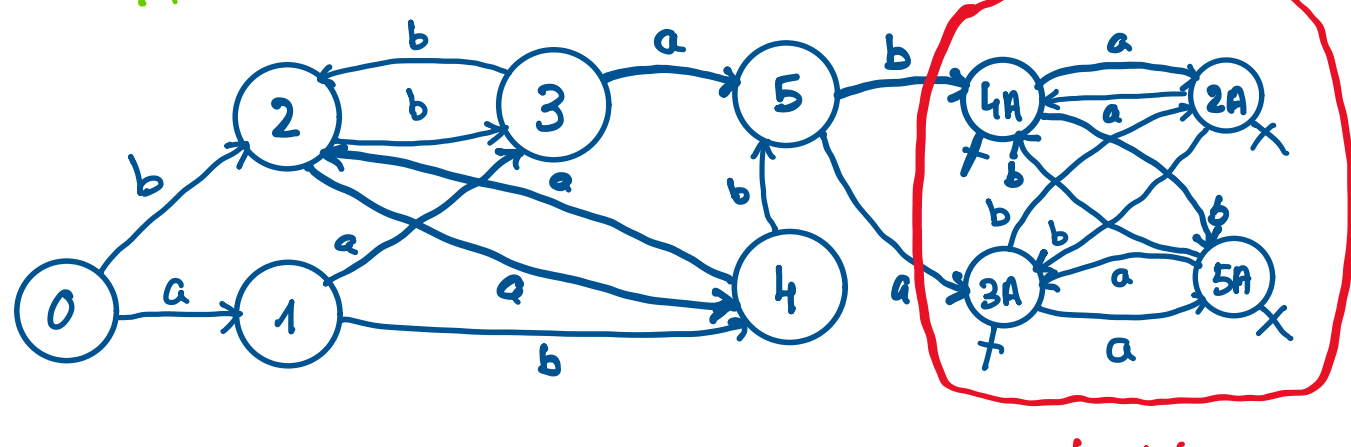
	a	b
0	0A	1B
1	1B	2A
2	1C	2D
3	2A	3B
4	2D	3C
5	3B	3A
	3C	3B
	3A	3C
	3D	3C



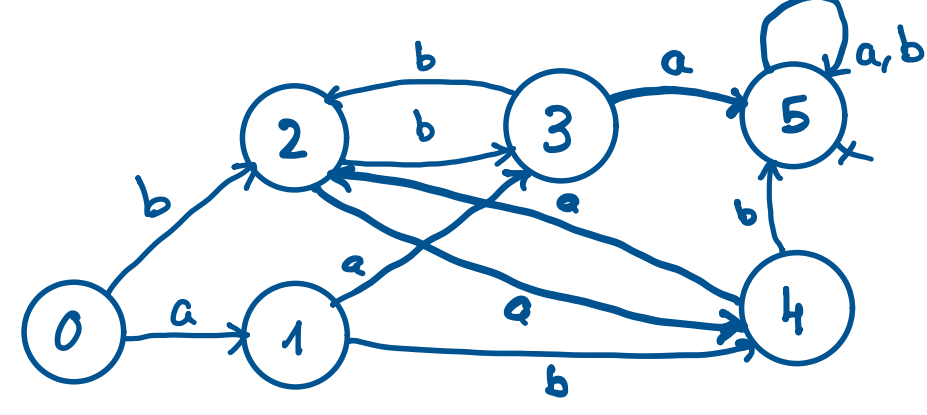
5 - Concatenamos $\{x\} \cdot \{y\}$



	a	b
0	1	2
1	3	4
2	4	3
3	5	2
4	2	5
5	3A	4A
3A	5A	2A +
4A	2A	5A +
2A	4A	3A +
5A	3A	4A +



Bucle del que nunca salimos y siempre son estados aceptadores



6- Aplicamos el complementario

