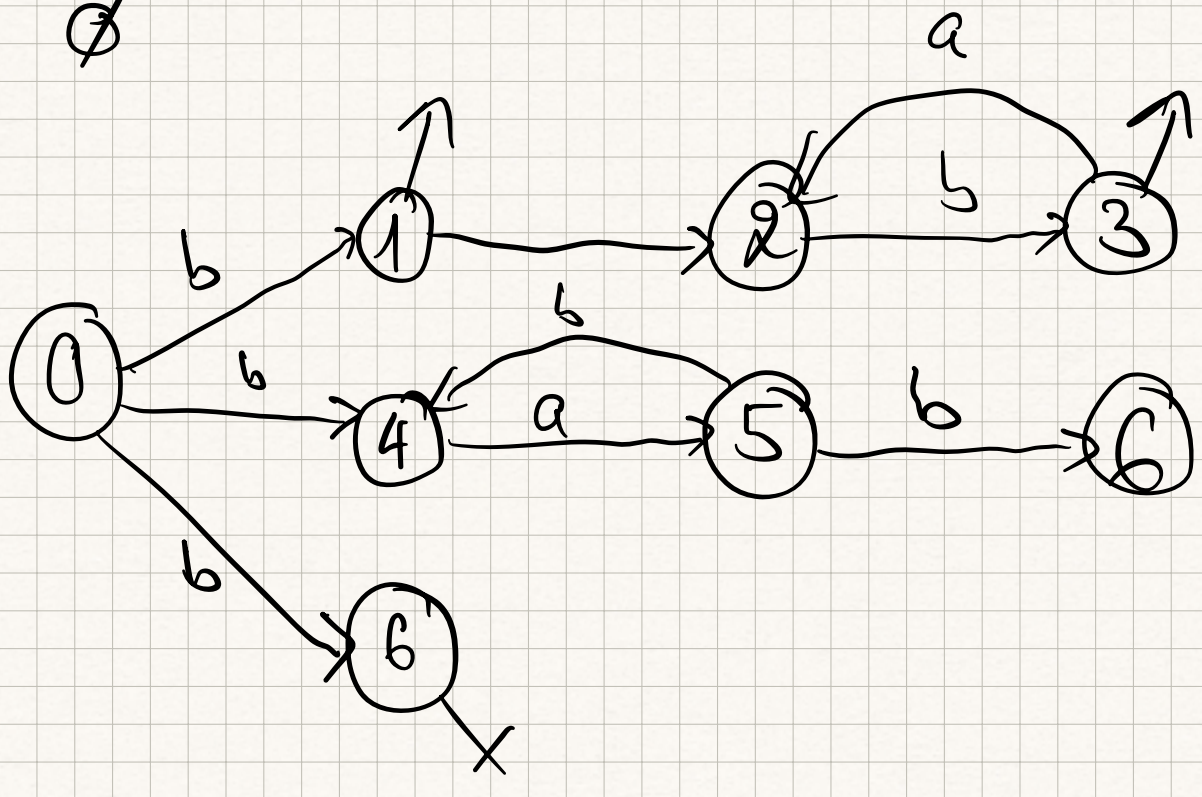
Glushkov

$$b(ab)^* + (ba)^* b$$

$$= b_1 (a_2 b_3)^* + (b_4 a_5)^* b_6$$

	SUCC		
$\emptyset$	b_1	b_4	b_6
b_1	a_2		
a_2	b_3		
b_3	a_2		
b_4	a_5		
a_5	b_4	b_6	
b_6	$\emptyset$		



Ex1 Examen

$$(a^*(ab+ba)^* + (bb)^*)^*$$

$$=(a_1^*(a_2 b_3 + b_4 a_5)^* + (b_6 b_7)^*)^*$$

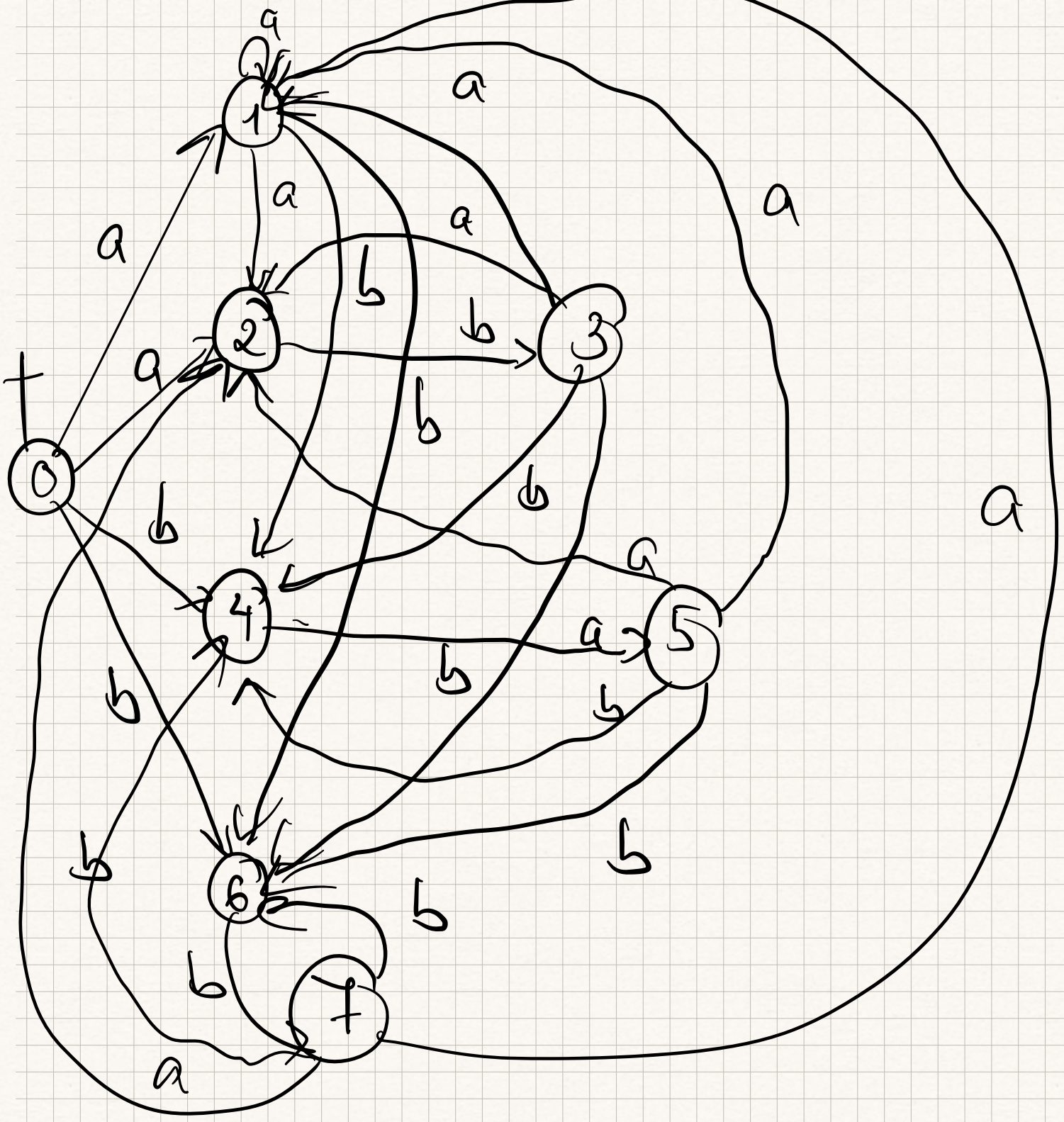
	SUCC			
$\emptyset$	a_1	a_2	b_4	b_6
a_1	a_1	a_2	b_4	b_6
a_2	b_3			
b_3	a_1	a_2	b_4	b_6
b_4	a_5			
a_5	a_1	a_2	b_4	b_6
b_6	b_7			
b_7	a_1	a_2	b_4	b_6

$First(r') = \{a_1, a_2, b_4, b_6\}$

$Last(r') = \{a_1, b_3, a_5, b_7\}$

$Next(r) = (Last, First)$

$Next(r) = (a_1, a_1)(a_1, a_2)($



0
1
2
3
4
5
6
7
a
b

Ex TD 4

$\mathcal{L}(A) = (a + ba + bba)^*$

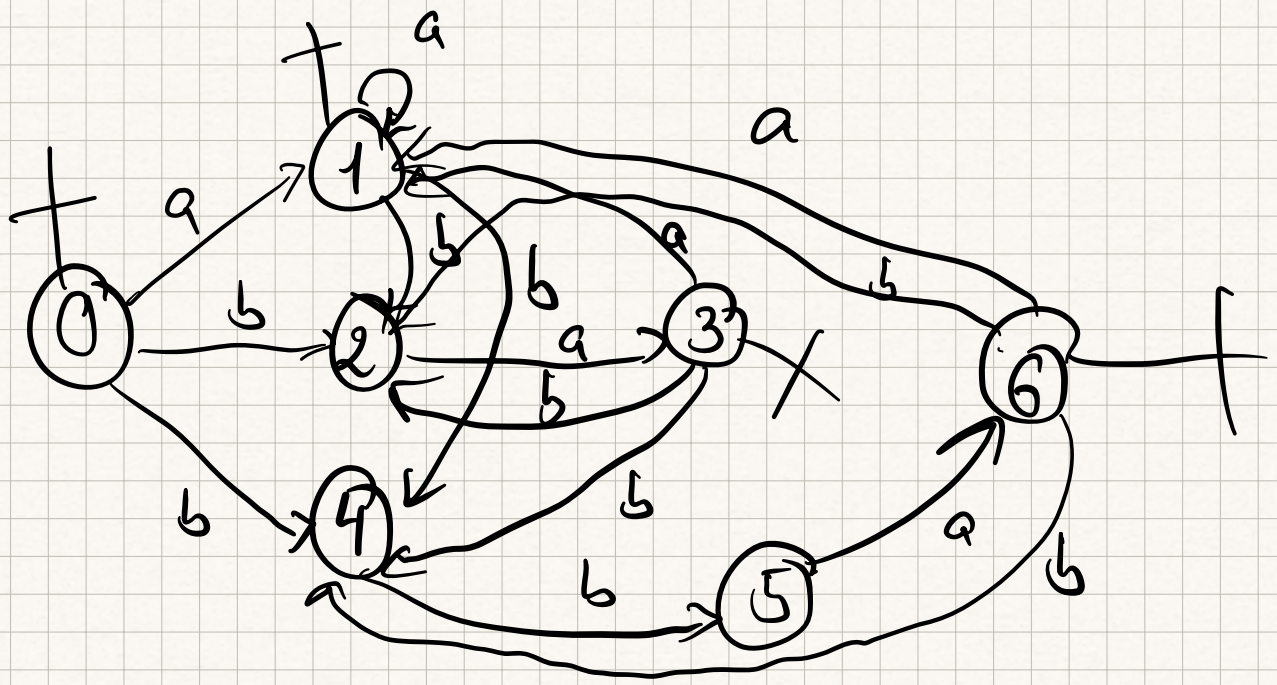
$= (a_1 + b_2 a_3 + b_4 b_5 a_6)^*$

	SUCC		
$\emptyset$ first	a_1	b_2	b_4
a_1	a_1	b_2	b_4
b_2	a_3		
a_3	a_1	b_2	b_4
b_4	b_5		
b_5	a_6		
a_6	a_1	b_2	b_4

$first(\mathcal{L}) = \{a_1, b_2, b_4\}$

$Last(\mathcal{L}) = \{a_1, a_3, a_6\}$

$Next(\mathcal{L}) = (Last, Next$



$$(a^*(ab+ba)^* + (bb)^*)^*$$

$$(a_1^*(a_2 b_3 + b_4 a_5)^* + (b_6 b_7)^*)^*$$

	SUCC			
$\emptyset$	a_1	a_2	b_4	b_6
a_1	a_1	a_2	b_4	b_6
a_2	b_3			
b_3	a_1	a_2	b_4	b_6
b_4	a_5			
a_5	a_1	a_2	b_4	b_6
b_6	b_7			
b_7	a_1	a_2	b_4	b_6

× $\underline{first}(r) = \{a_1, a_2, b_4, b_6\}$

× $\underline{Last}(r) = \{a_1, b_3, a_5, b_7\}$

× $Next(r) = (Last, first)$

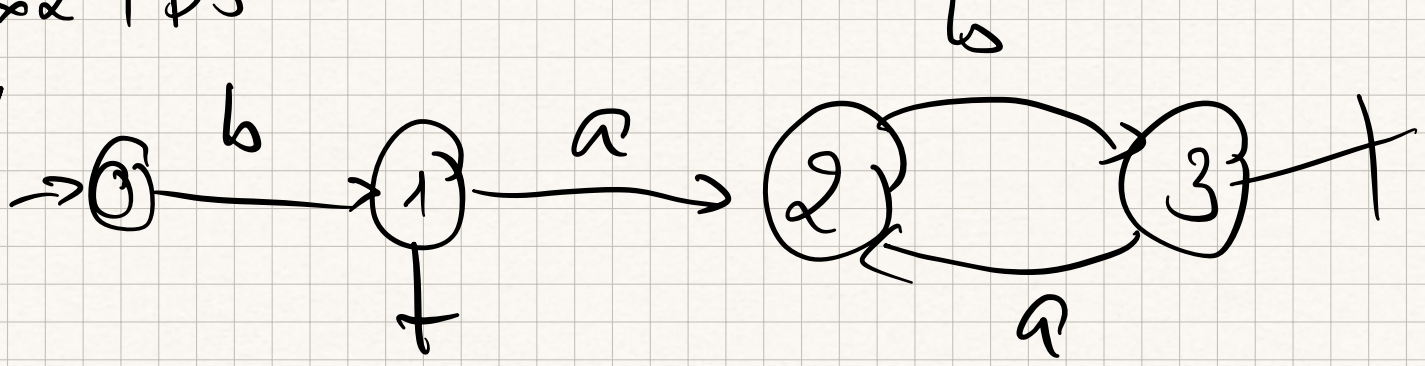
$Next(r)$

(a_2, b_3)

Brzozowski

Ex 2 TD 5

1)



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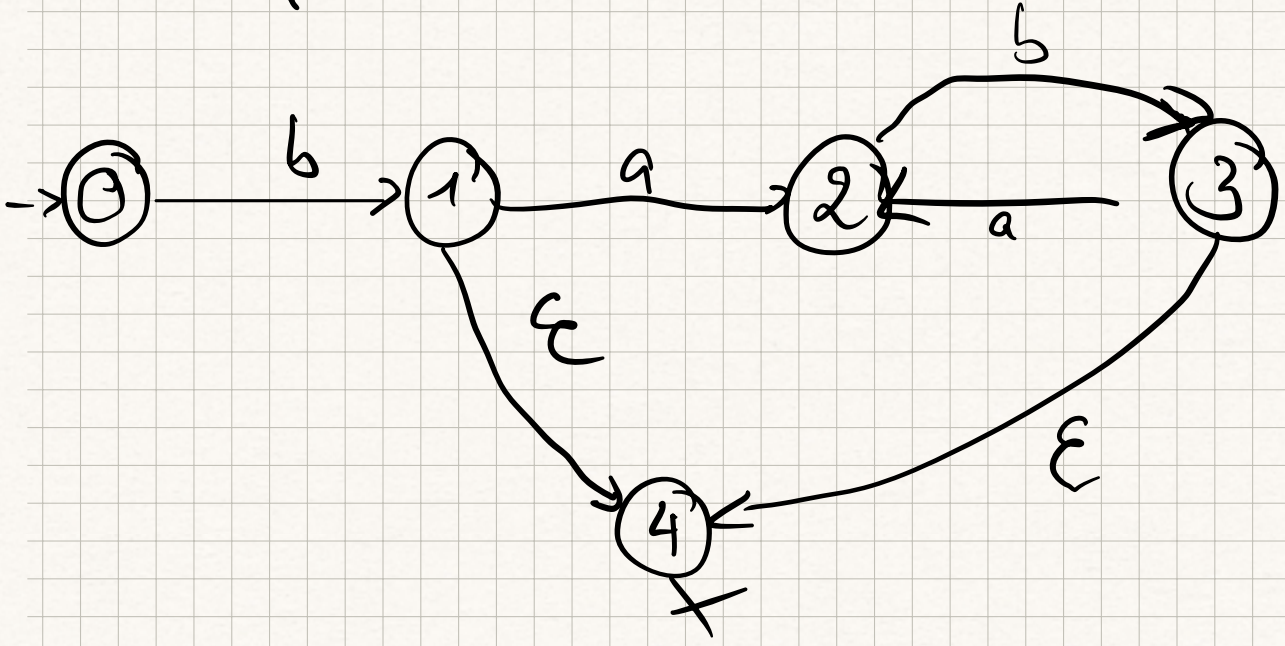
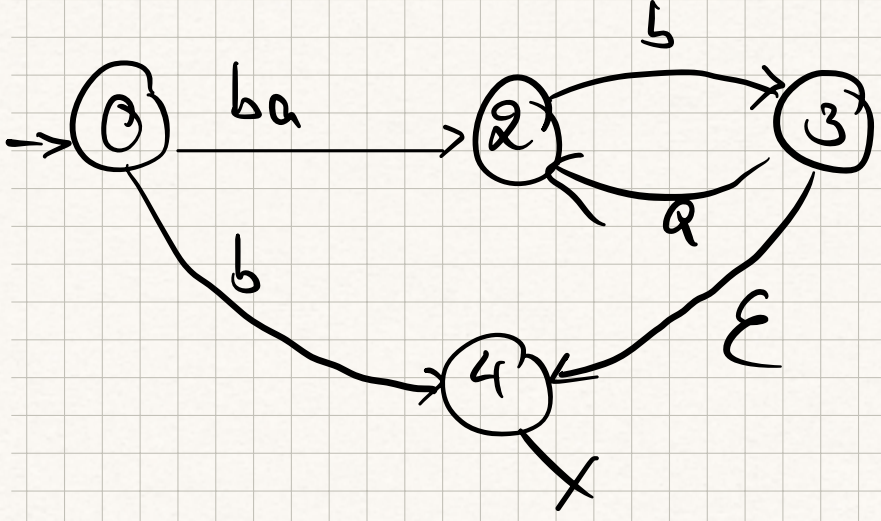
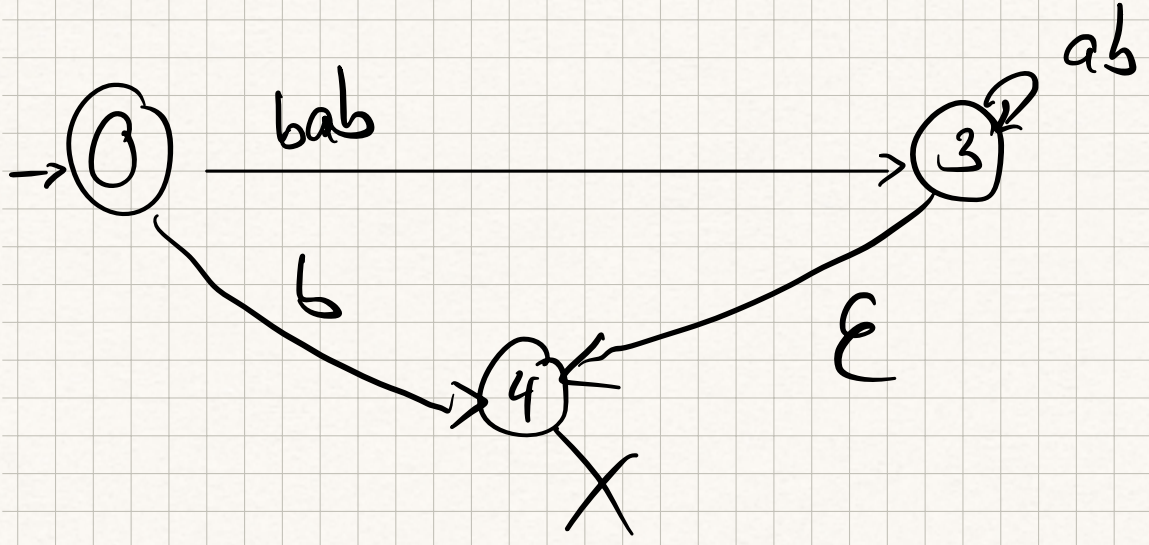


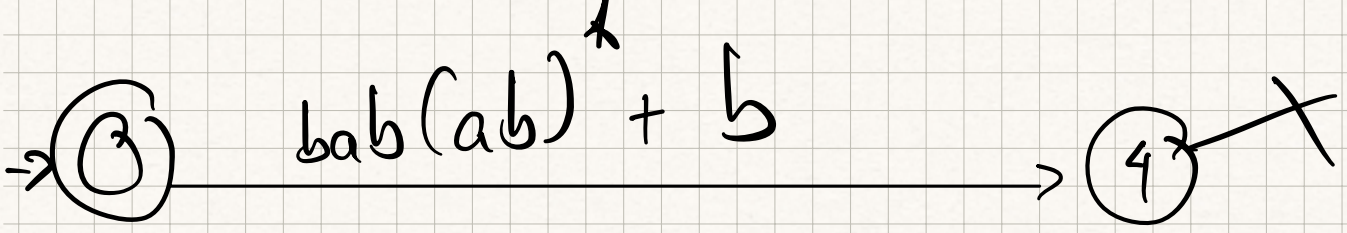
On élimine 1 :



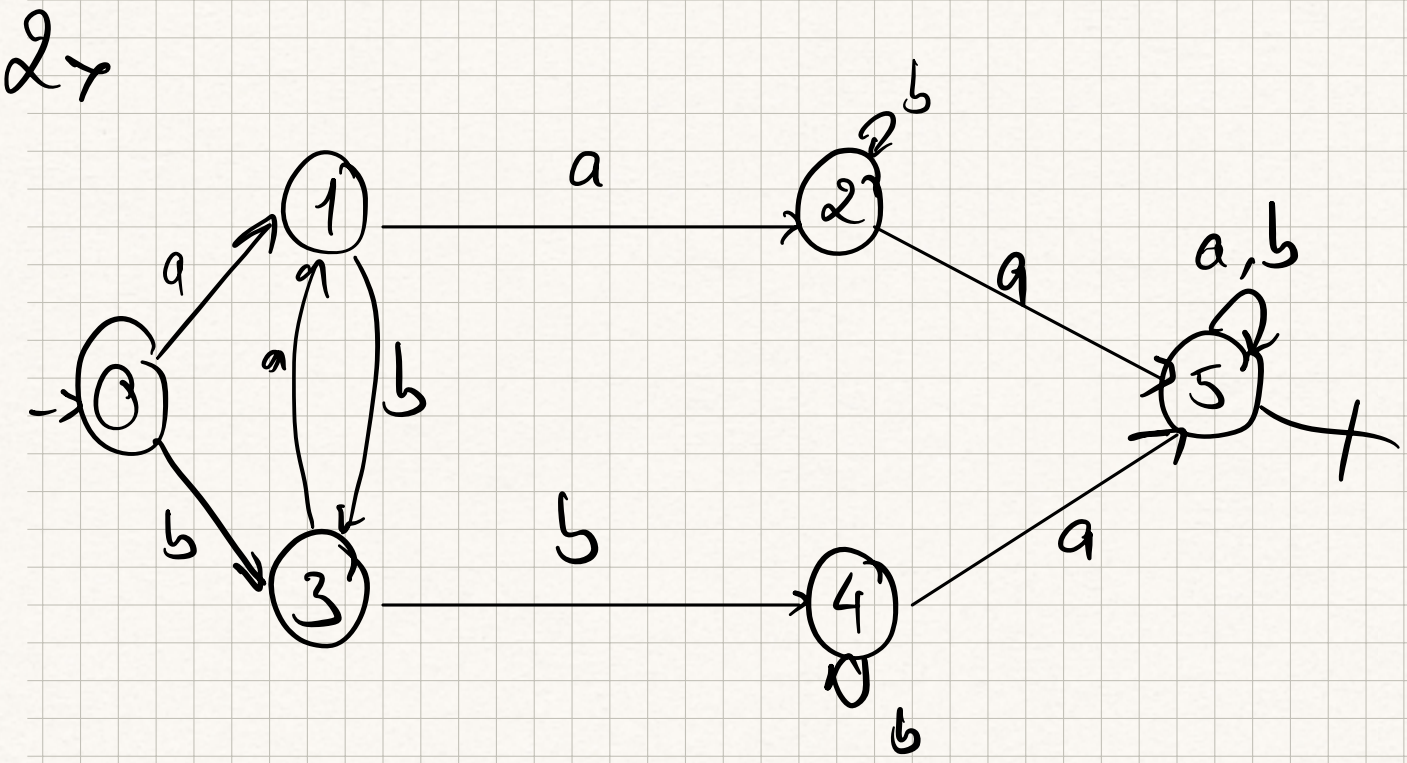
On élimine 2 :



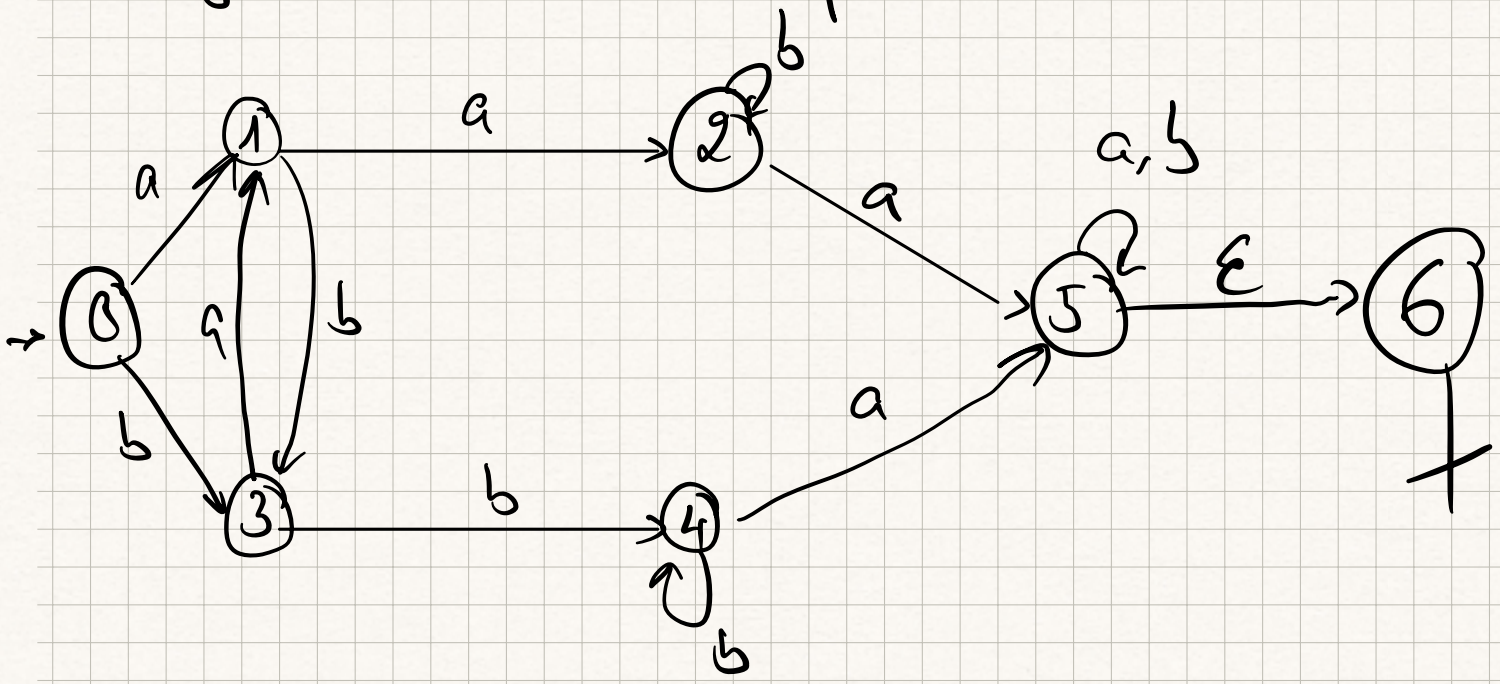
On élimine 3 :



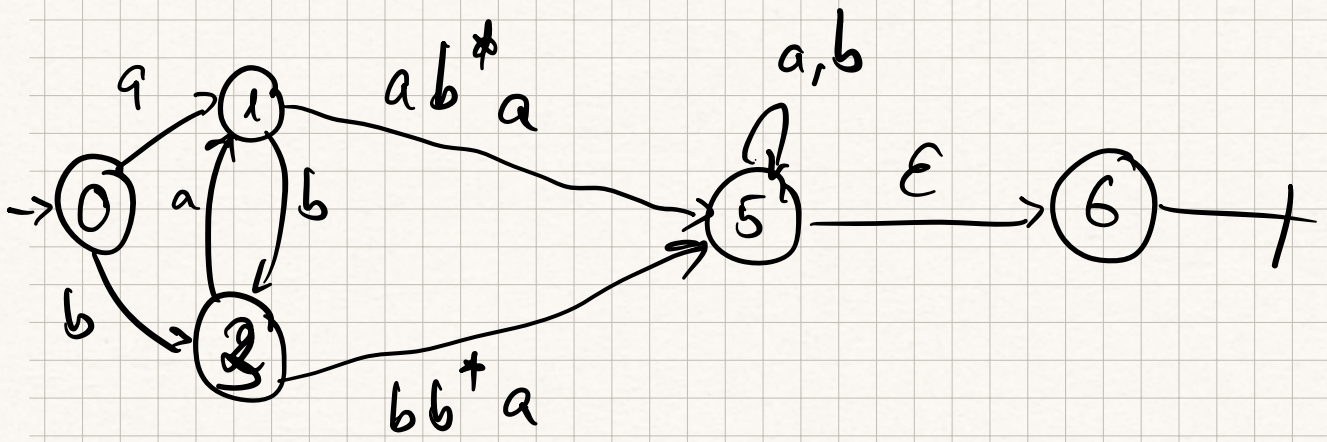
2)



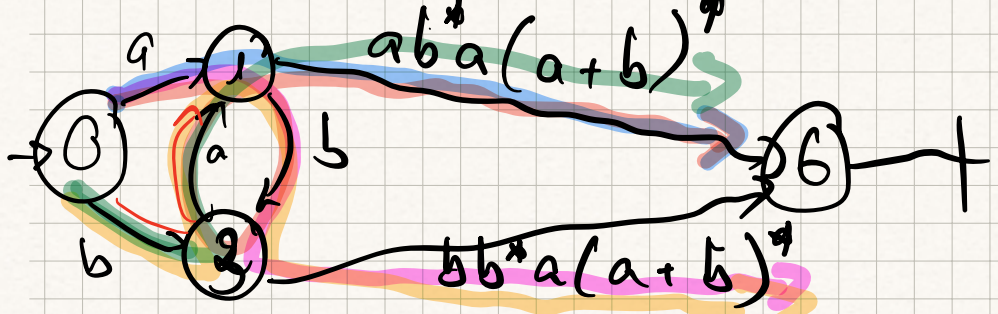
On rajoute 6ème étape



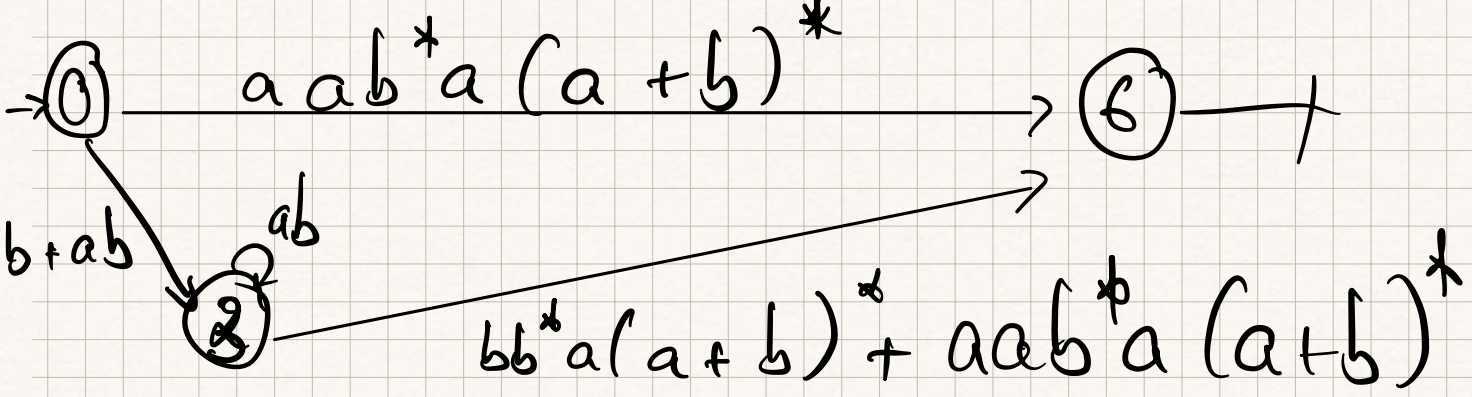
On élimine 2 et 4



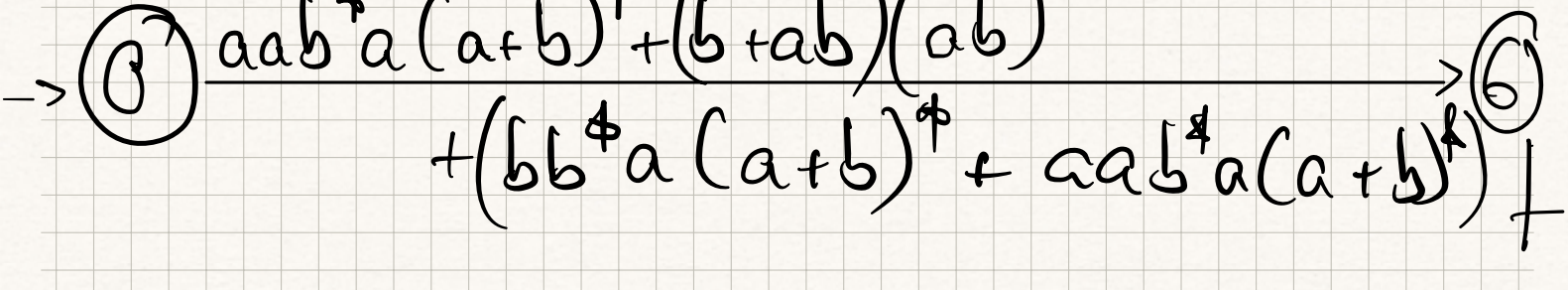
On élimine 5



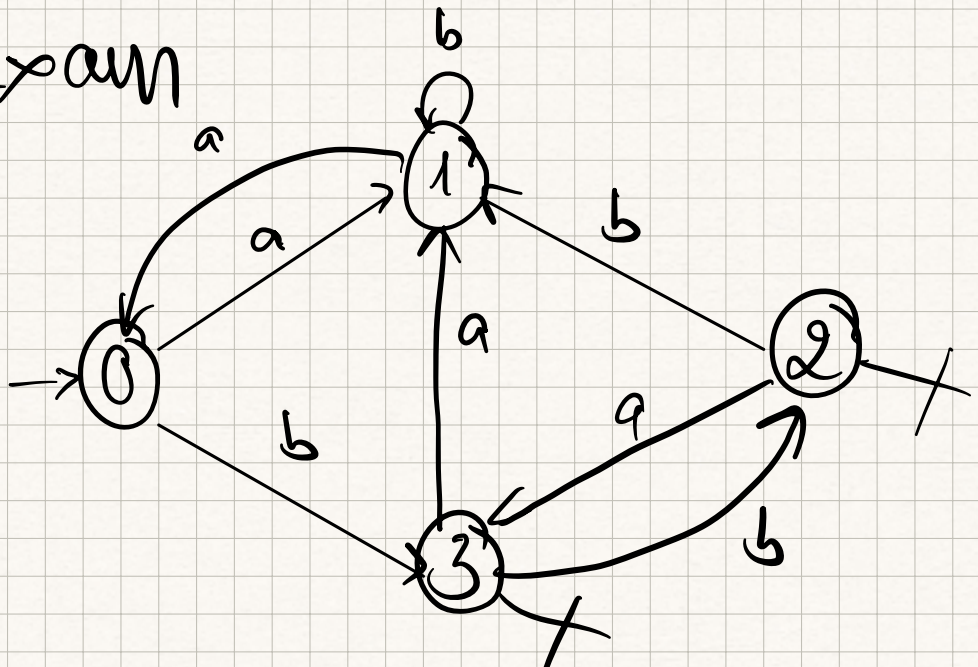
On élimine 1

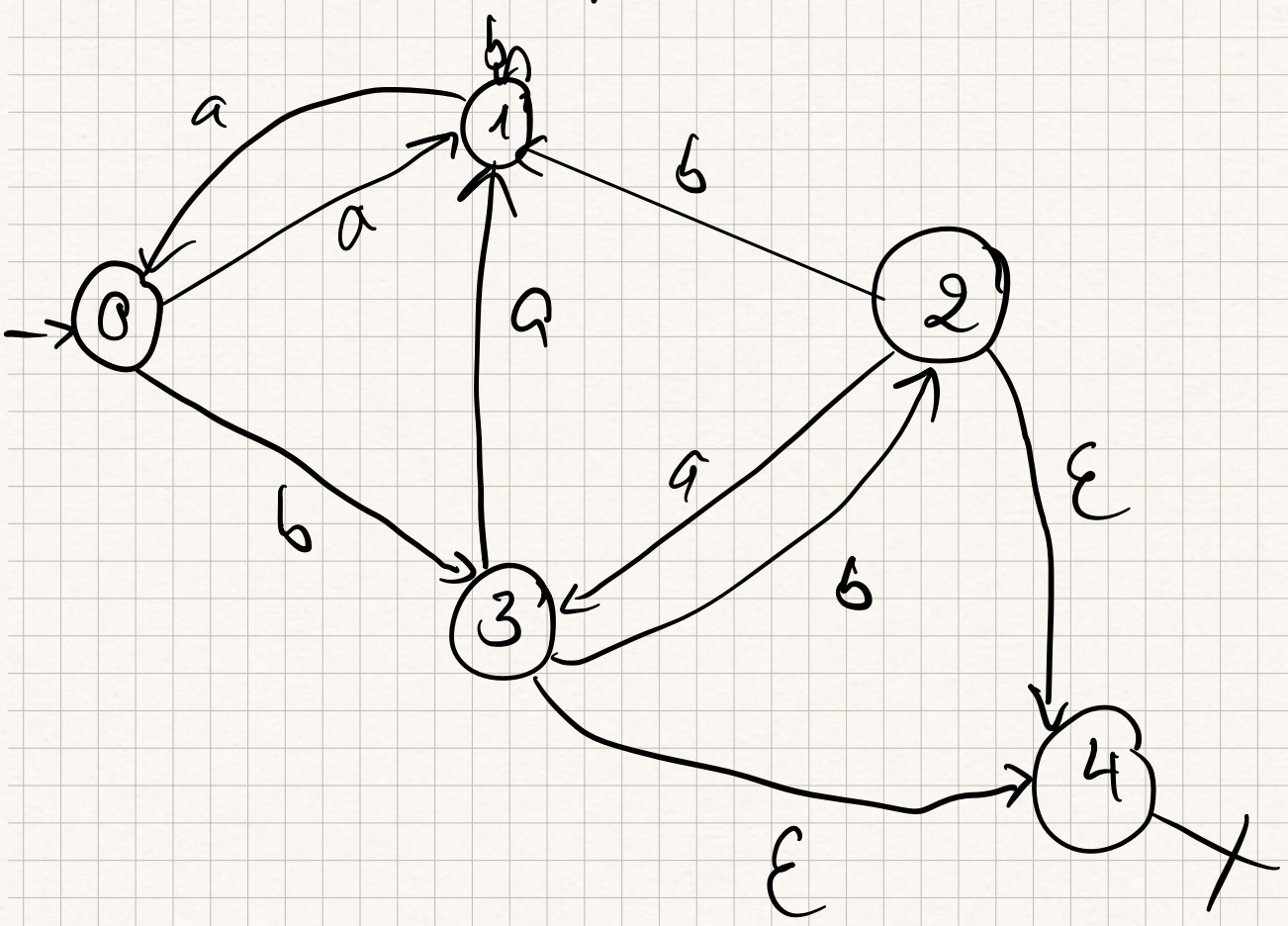


On élimine 3



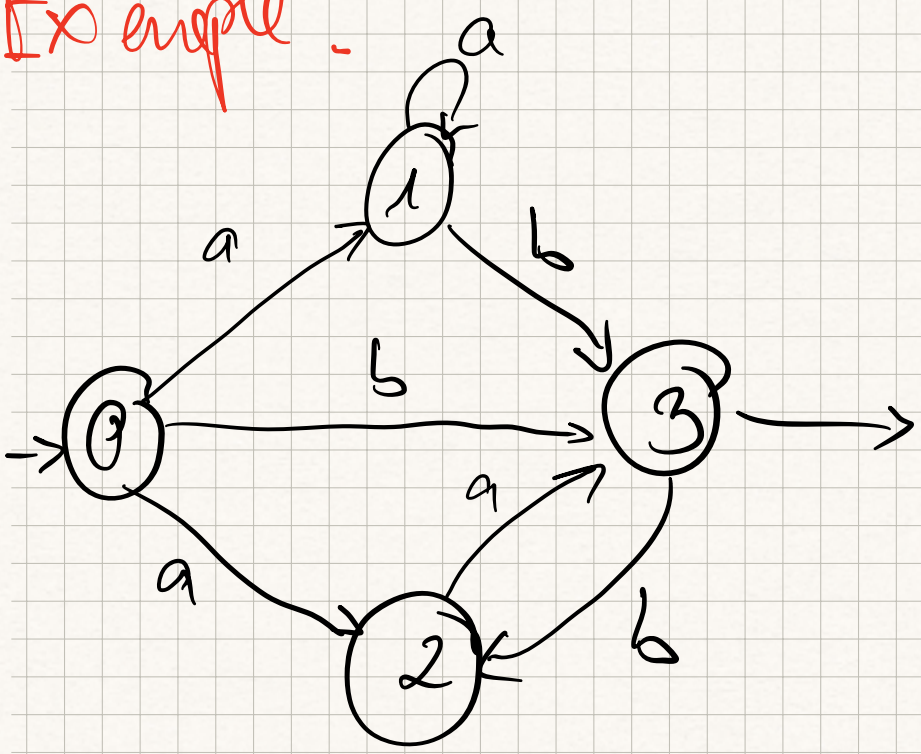
Exam

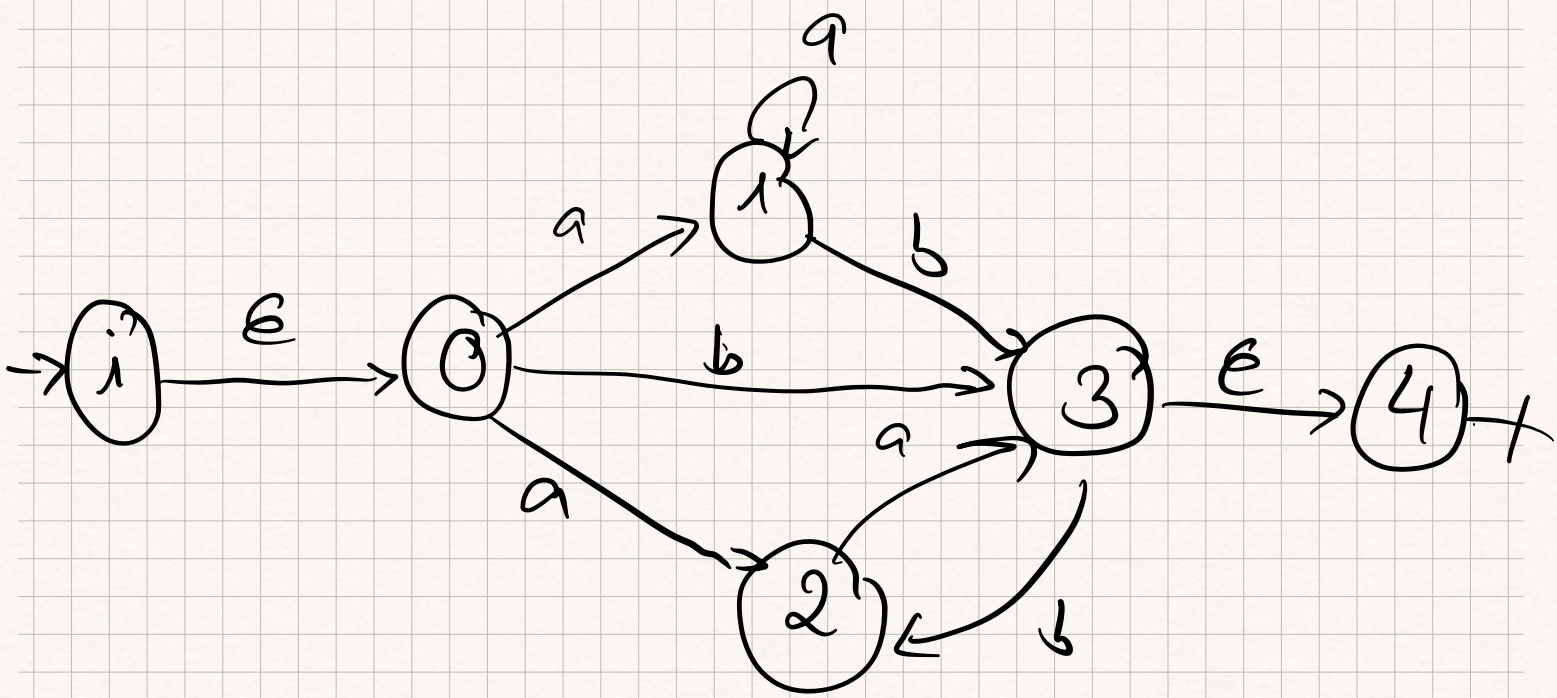




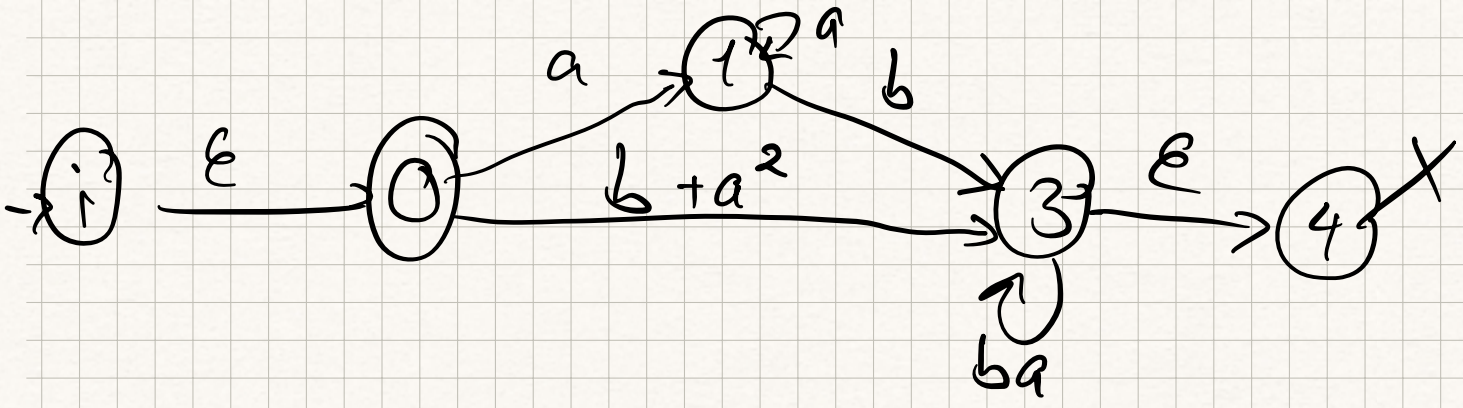
0
1
2
3
4
a
a
b
a
b
a
b
ε
ε

Exemple :

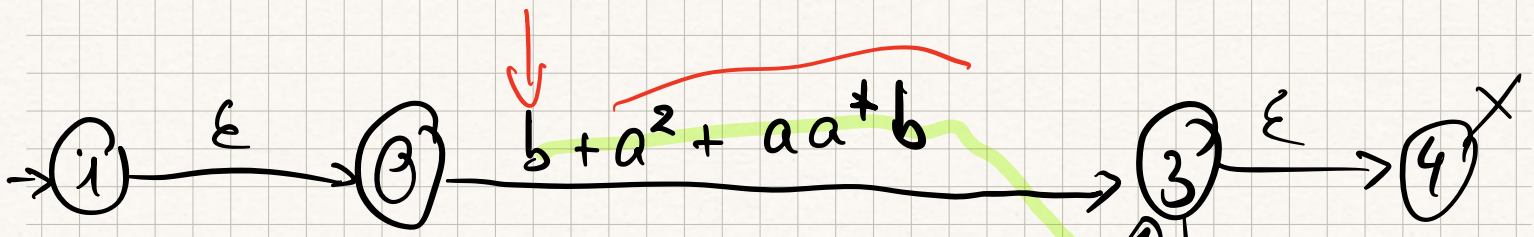




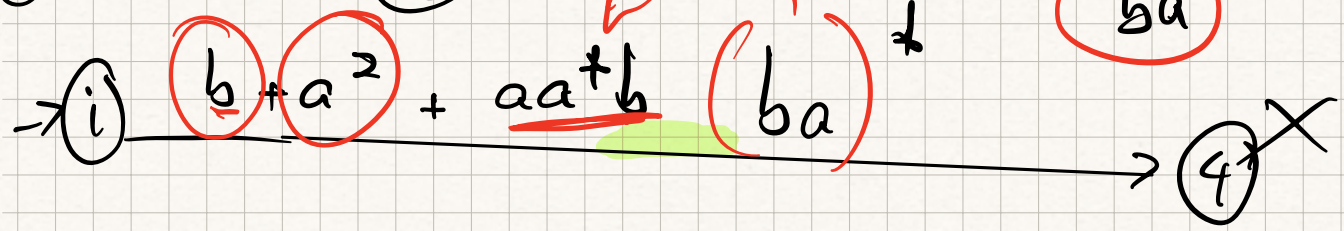
On élimine (2)



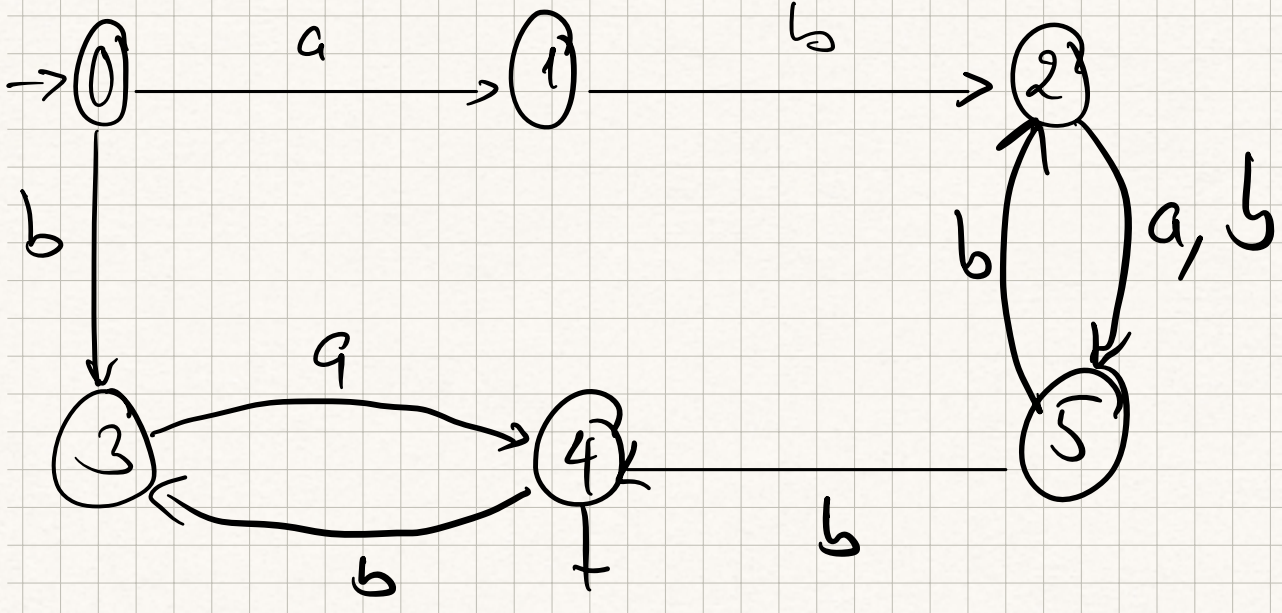
On élimine 1

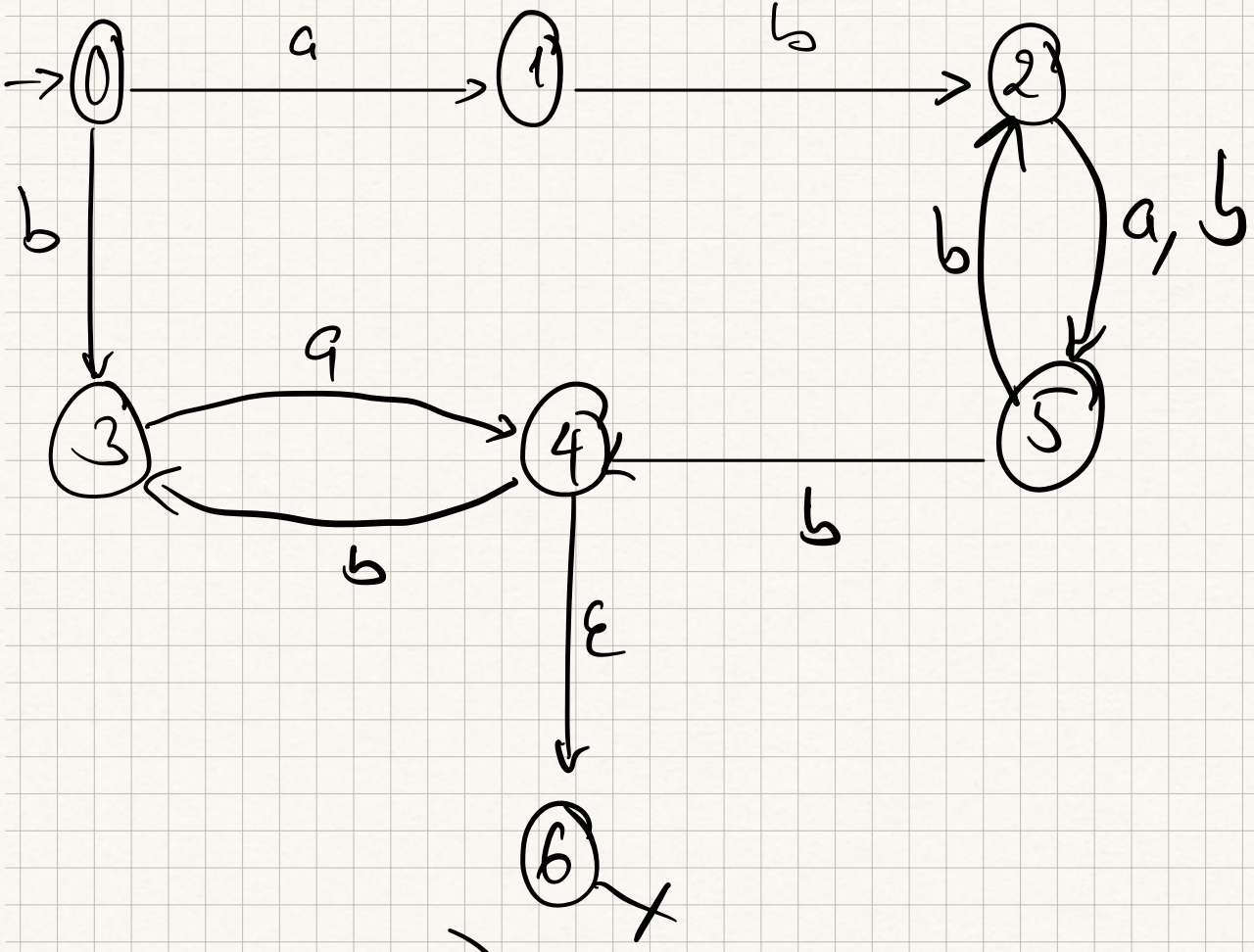


On élimine 3

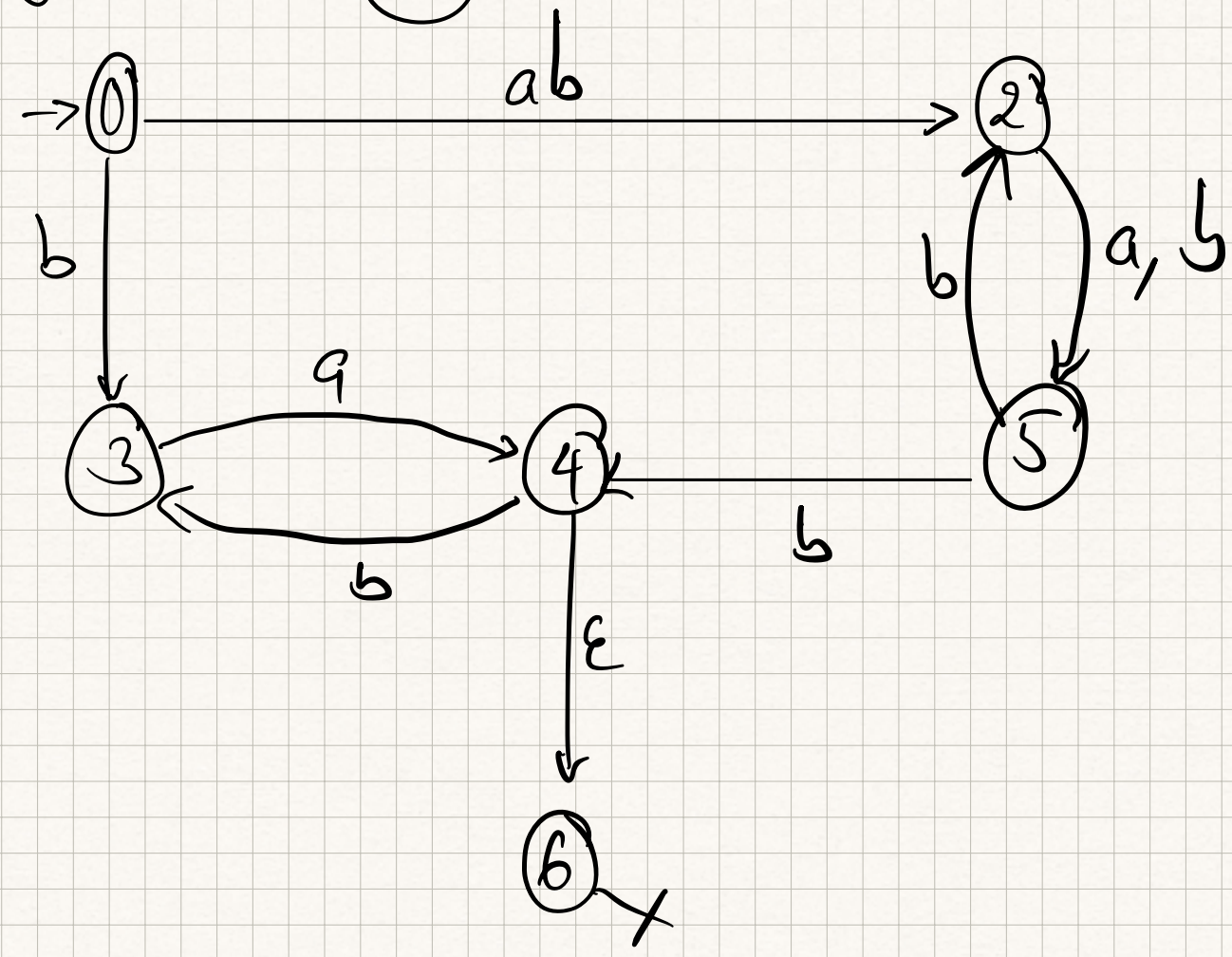


Exemple





On élimine 1



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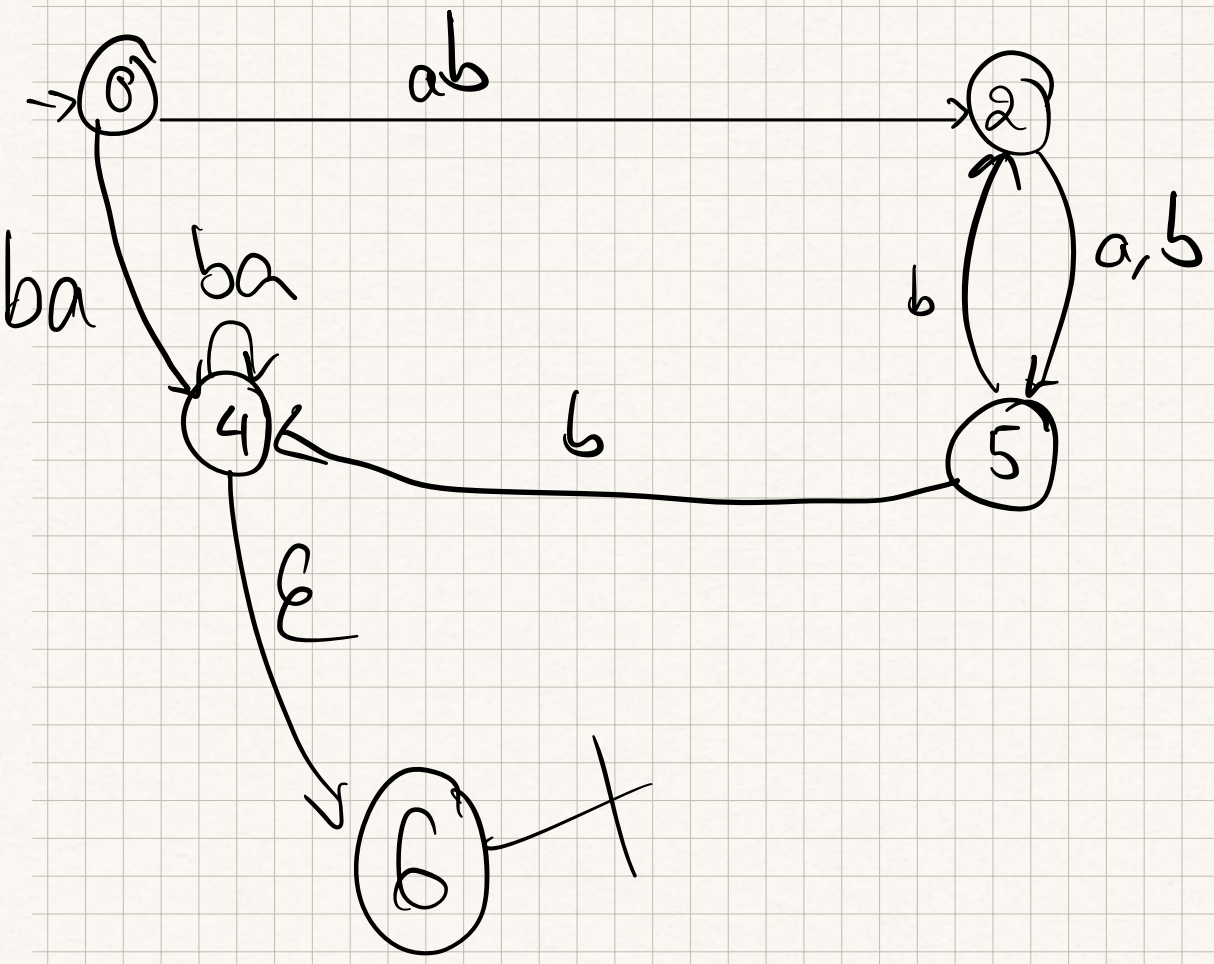
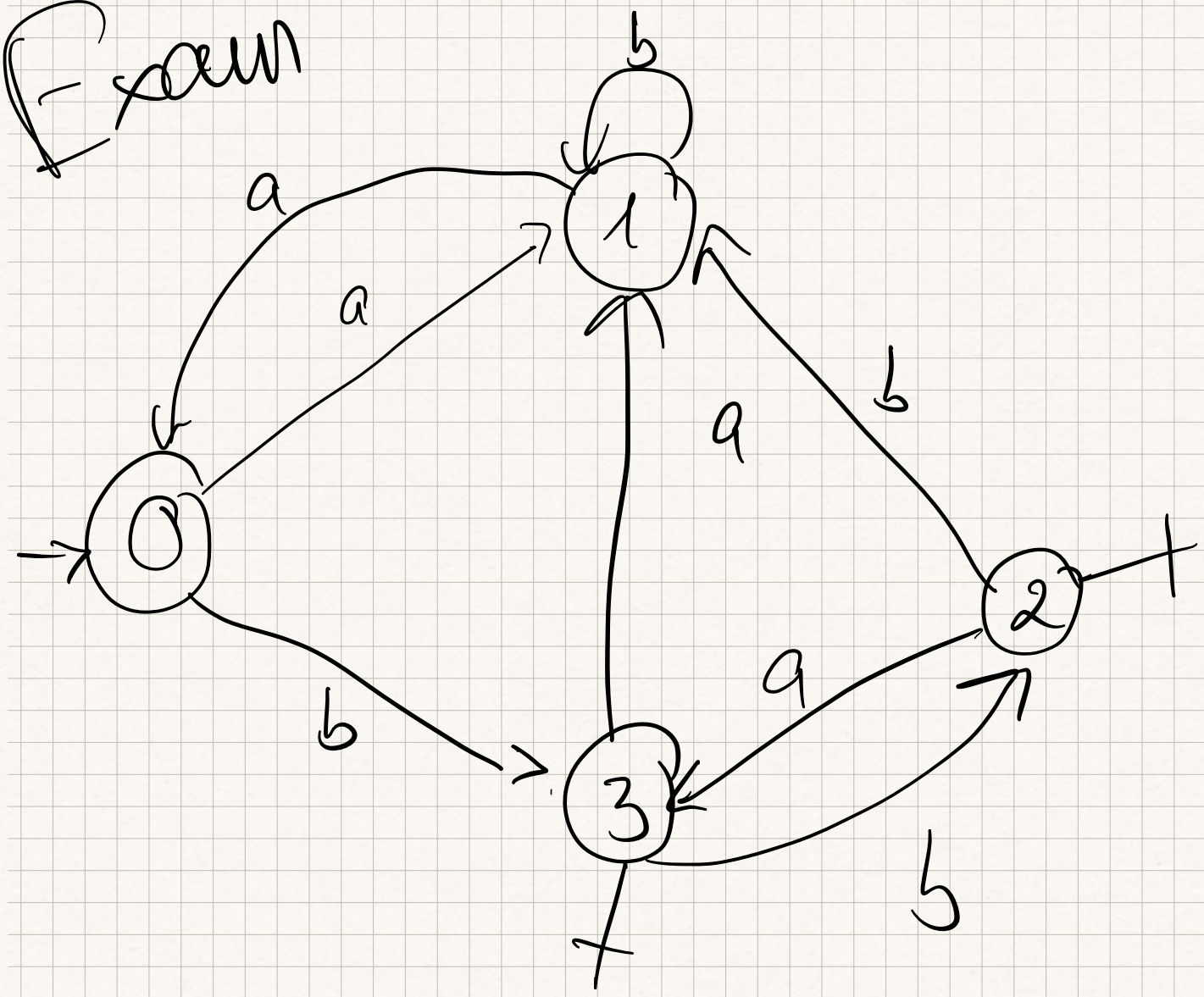
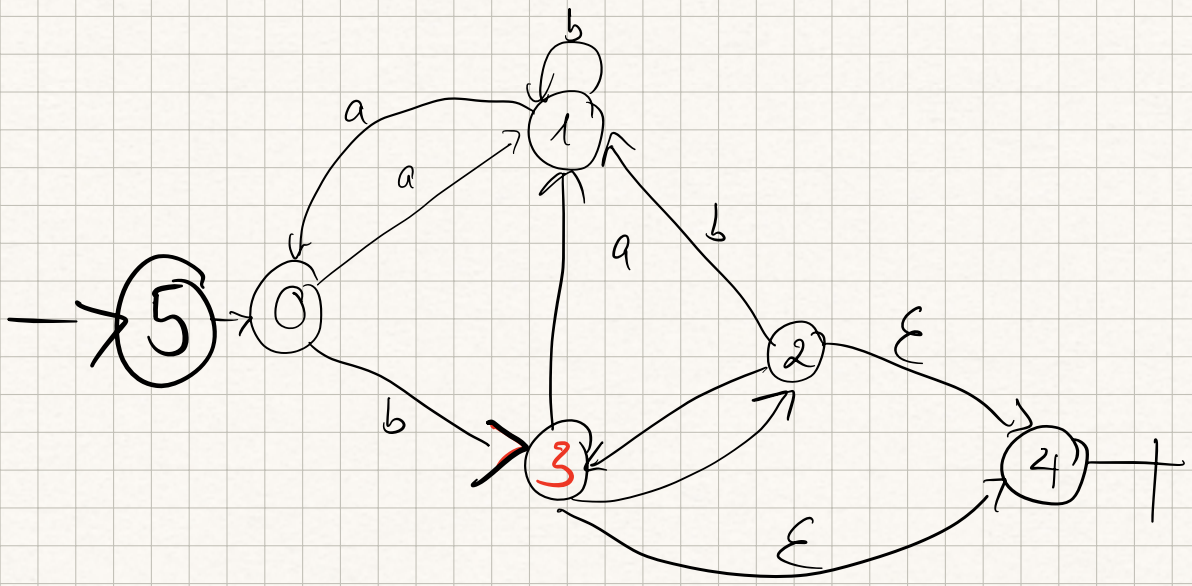
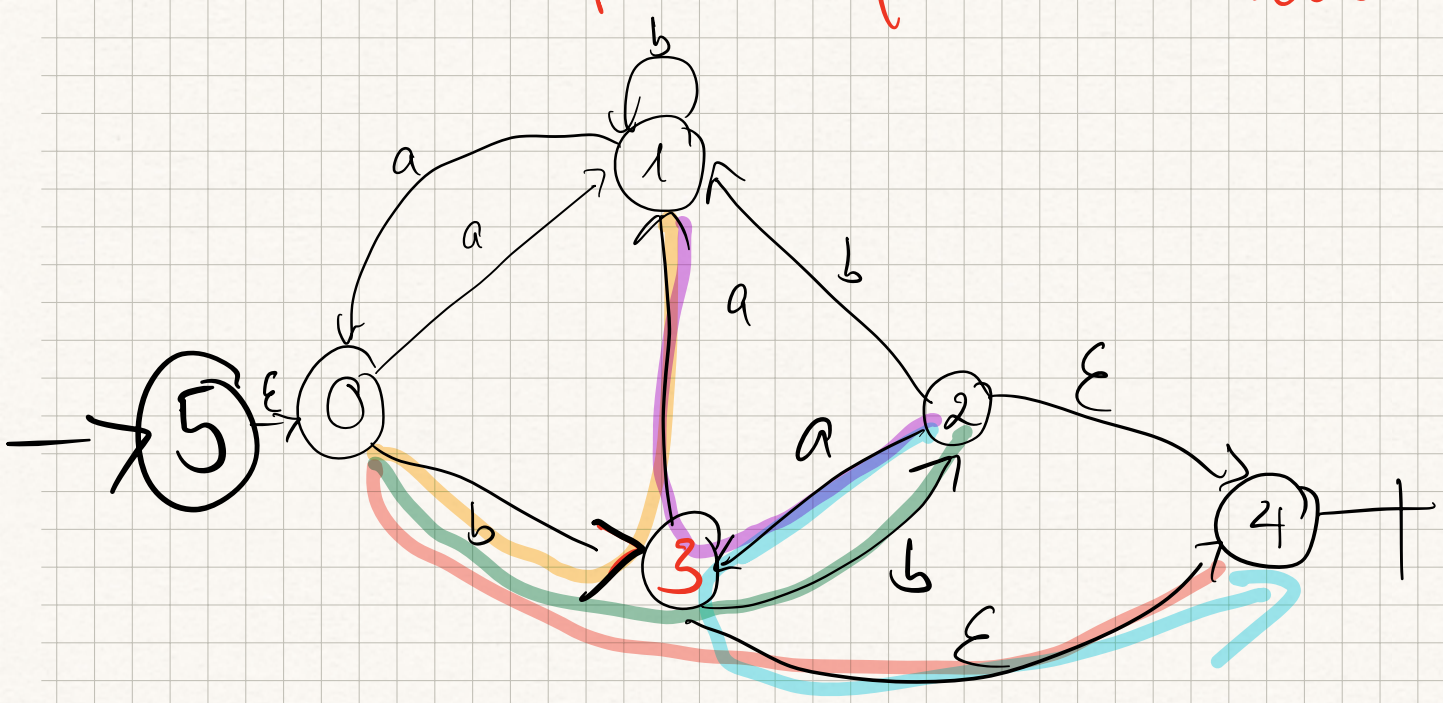


Exam

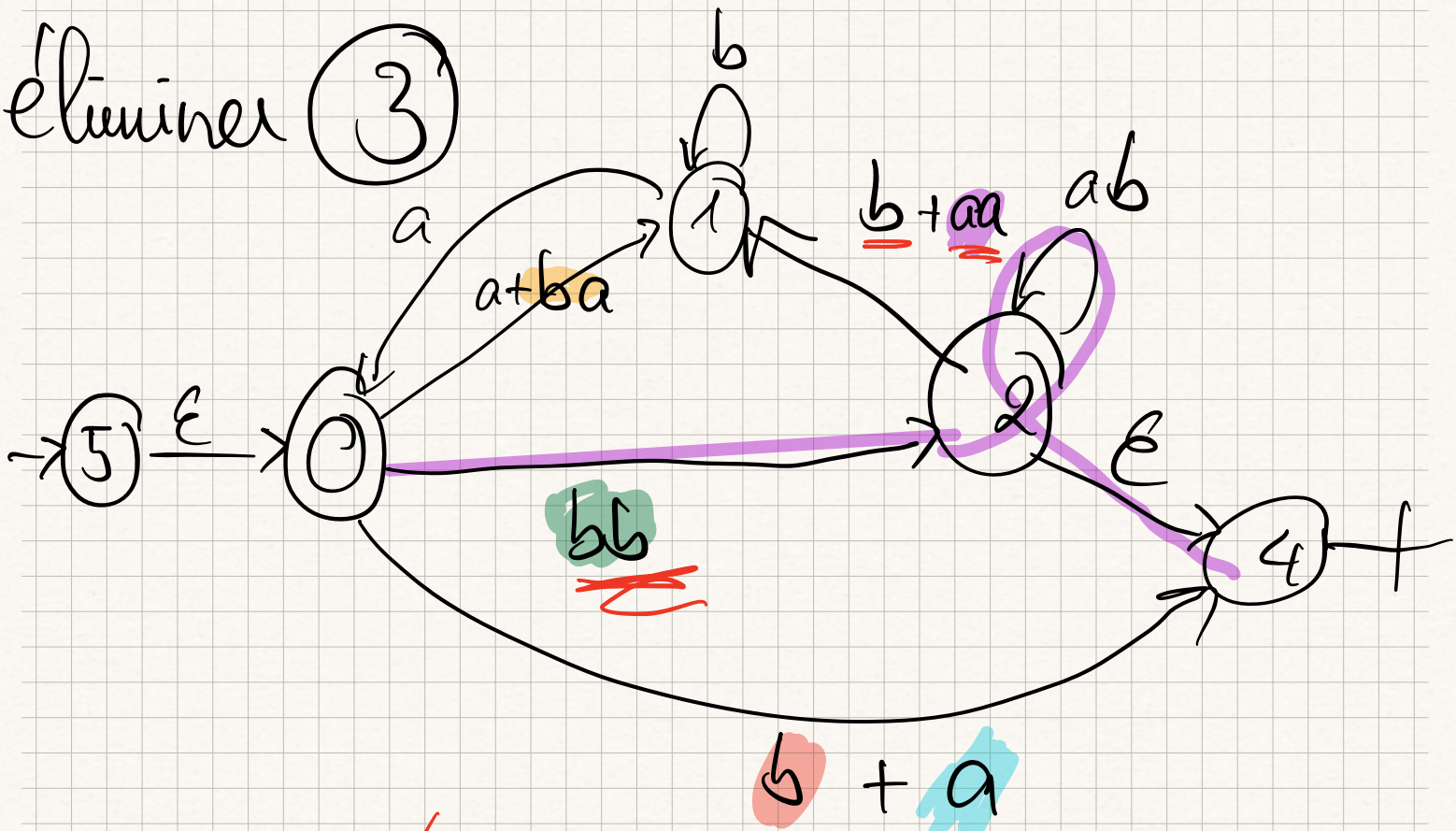




Etat initial : pas de flèches entrante

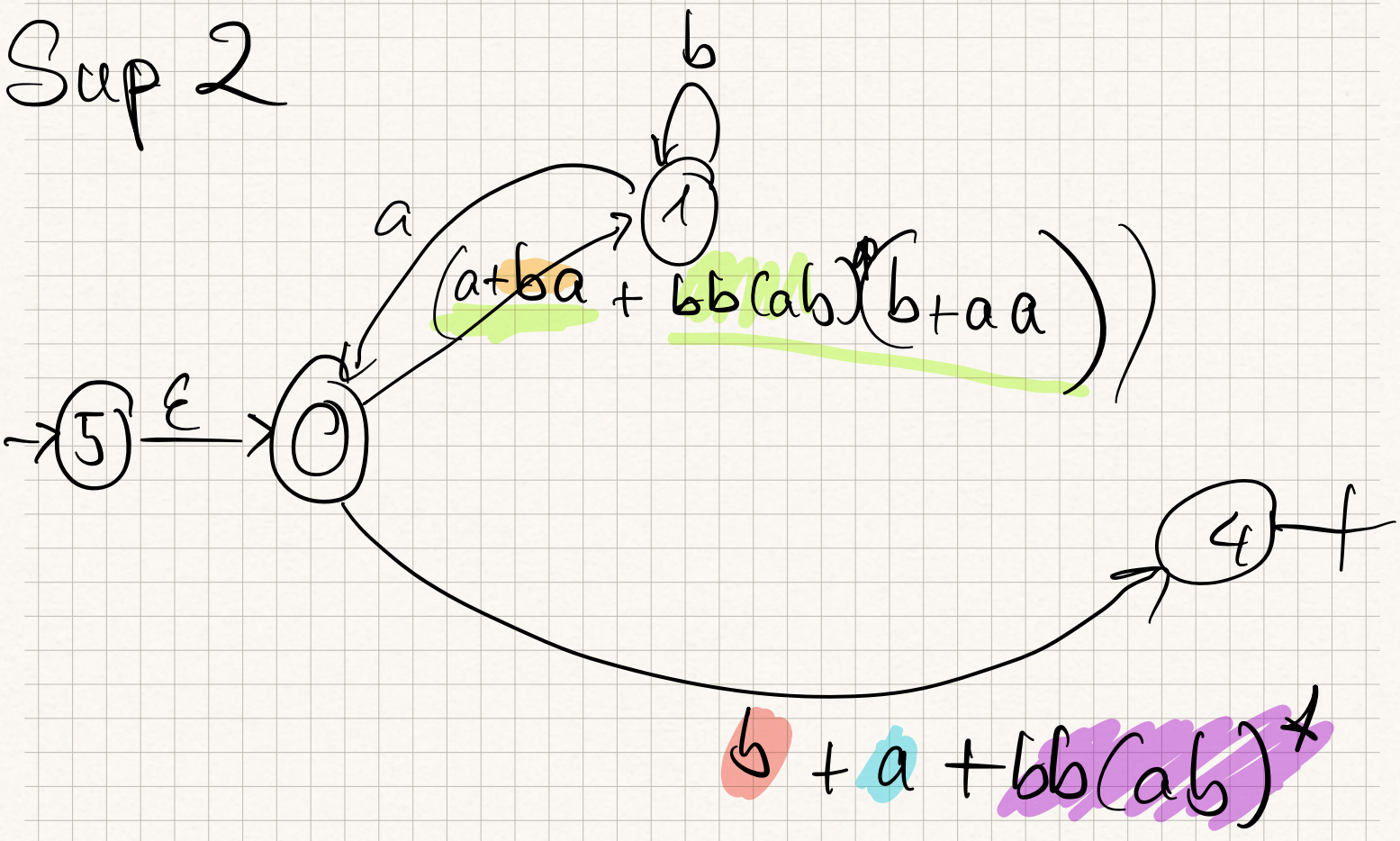


éliminer 3

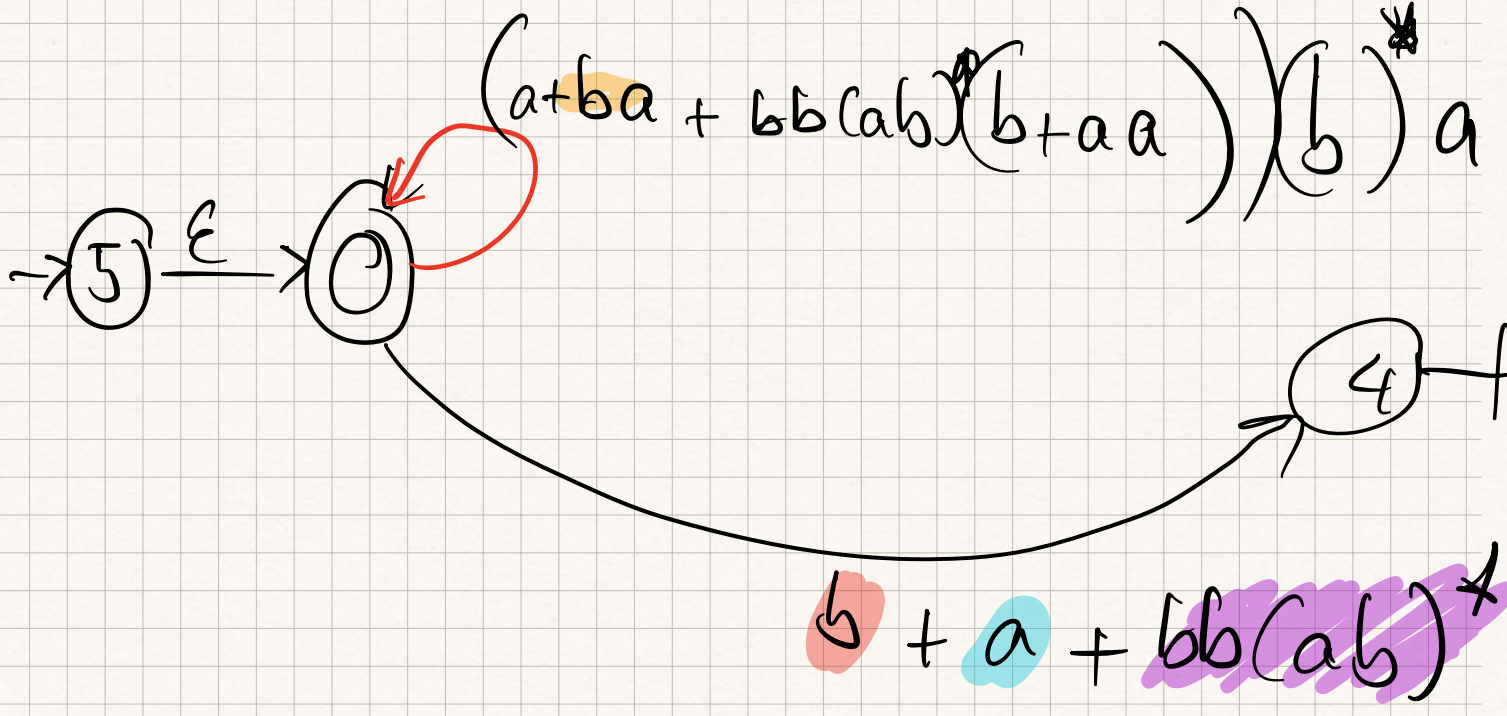


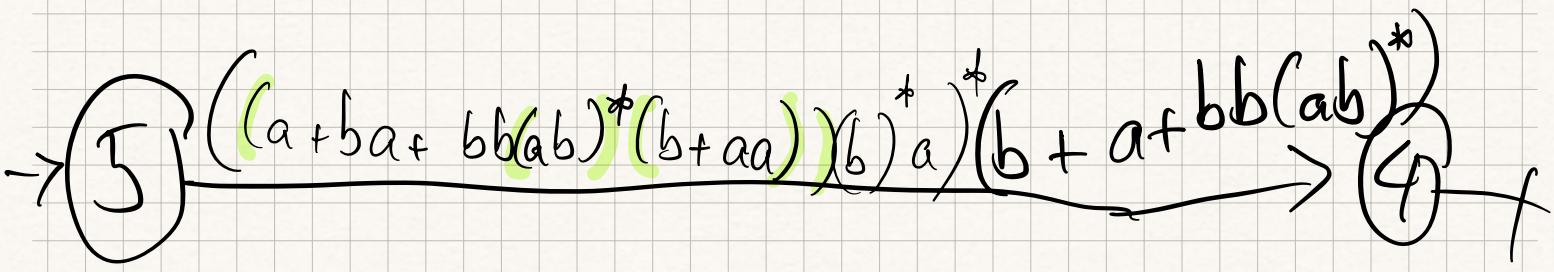
$$\underline{a+ba} + \underline{bb(ab)^* b} + \underline{aa}$$

Sup 2

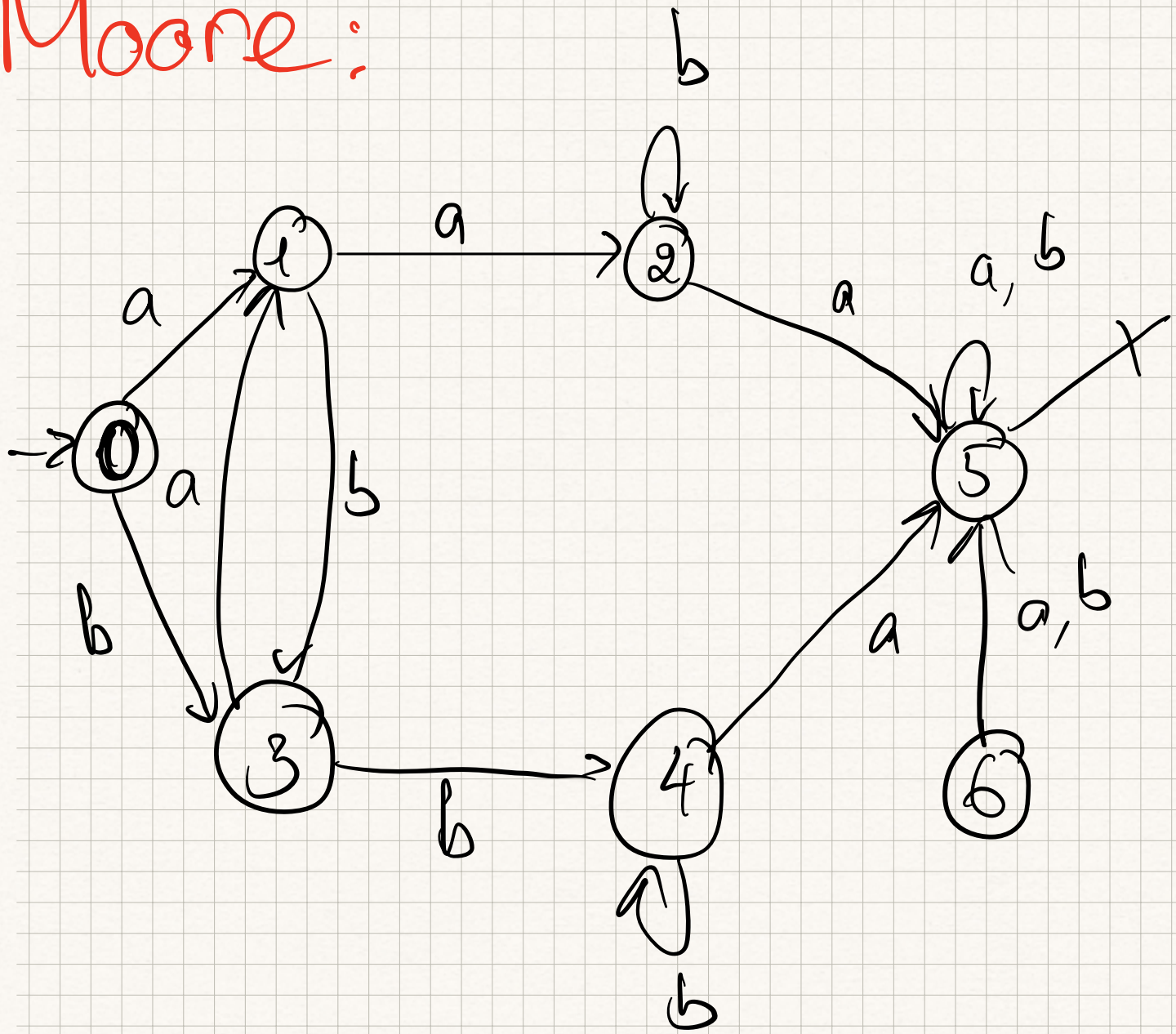


Supp 1





Moore:



	0	1	2	3	4	5	~~6~~
a	1	2	5	1	5	5	
b	3	3	2	4	4	5	

b n'est pas accessible. On enlève 6

{0, 1, 2, 3, 4, 5} {5}

(a sépare 3 et 4)

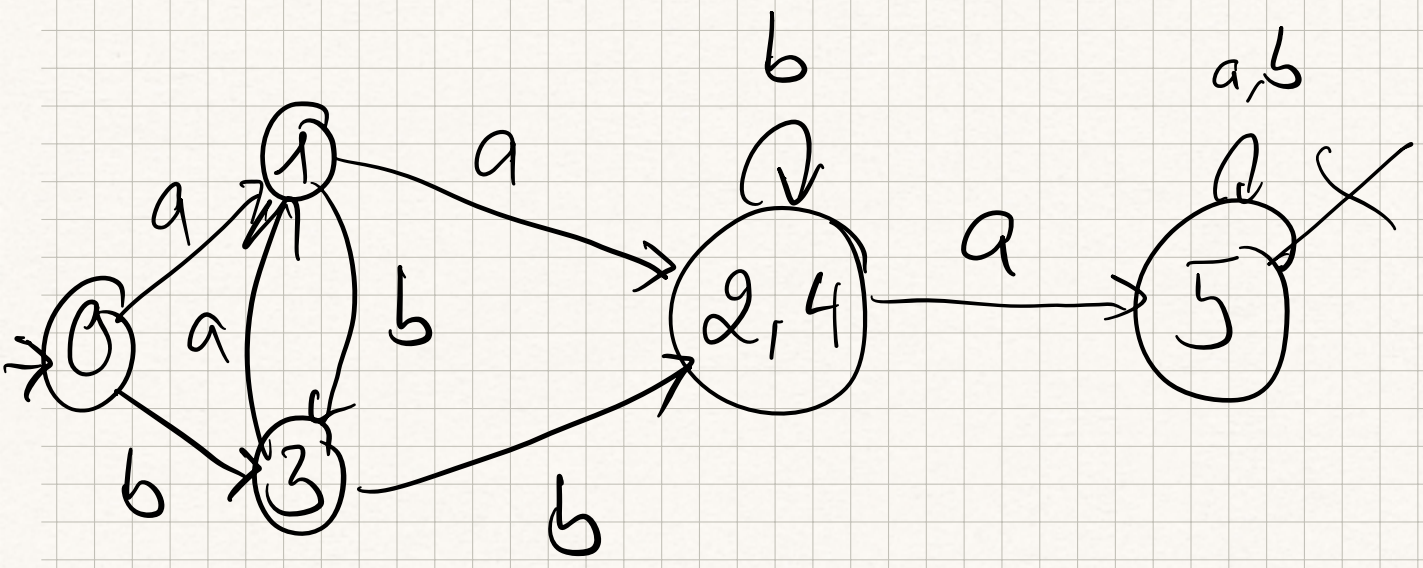
{0, 1, 3} {2, 4} {5}

(a sépare 1 et 3)

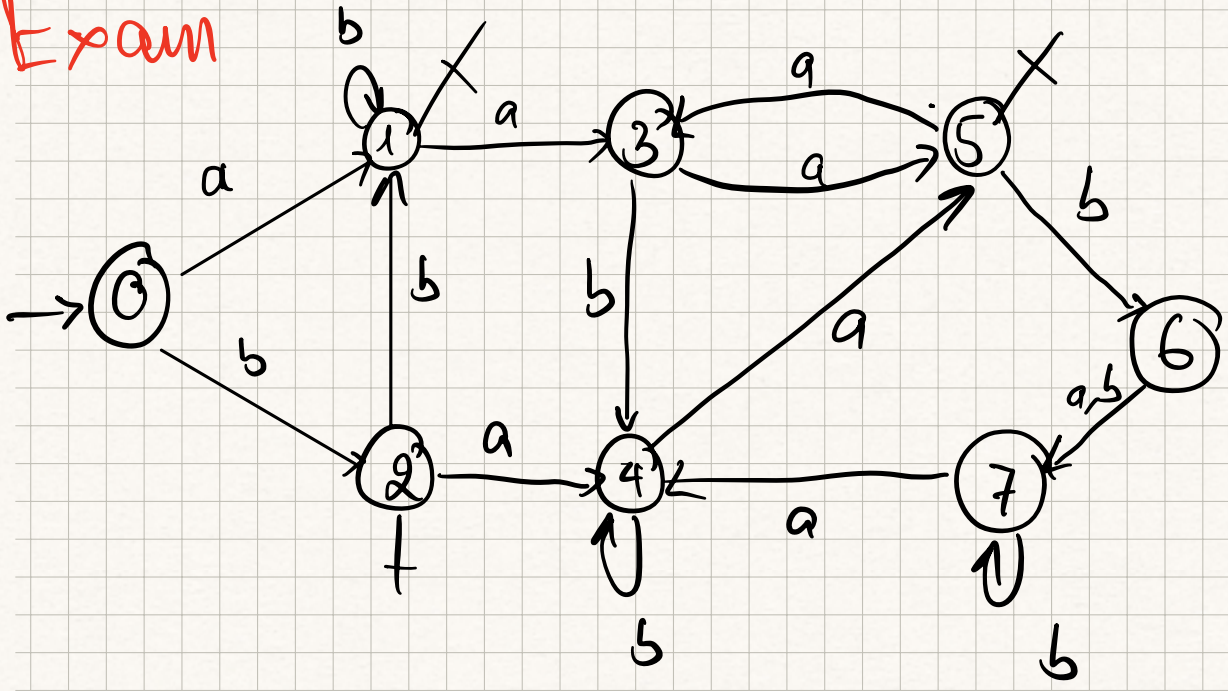
{0, 3} {1} {2, 4} {5}

(b sépare 0 et 3)

{0} {3} {1} {2, 4} {5}



Exam



	0	1	2	3	4	5	6	7
a	1	3	4	5	5	3	7	4
b	2	1	1	4	4	6	7	7

Séparer états finaux et les autres

{0, 3, 4, 6, 7} {1, 2, 5}

b sépare 2 et 5

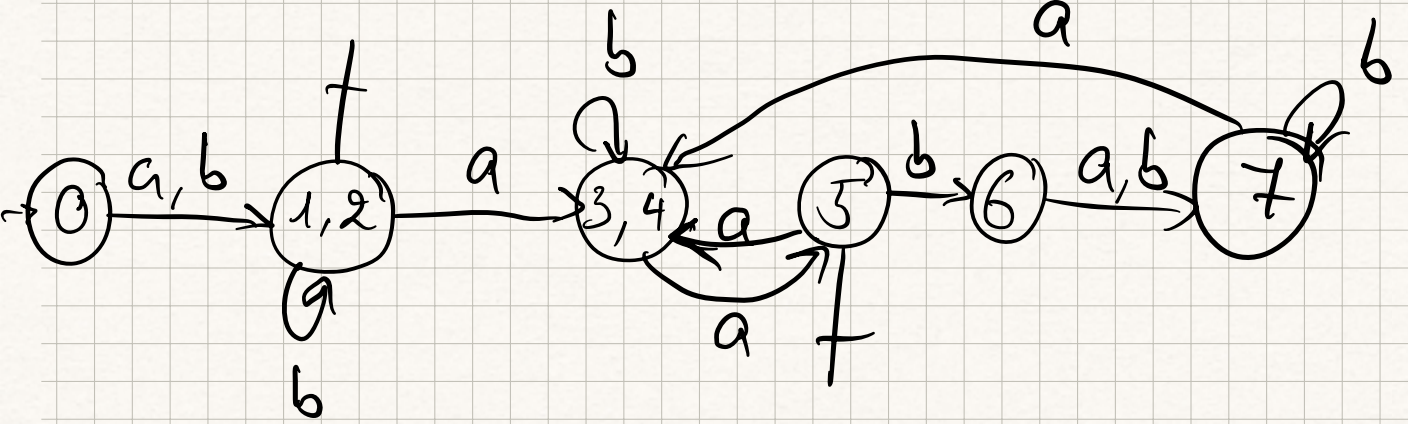
{1,2} {5} {0, 3, 4, 6, 7}

a sépare 0 et 3

{0, 6, 7} {3, 4} {1, 2} {5}

a sépare 0 et 6

{0} {3, 4} {1, 2} {5} {6, 7}

a sépare 6 et 7

{0} {3, 4} {1, 2} {5} {6} {7}