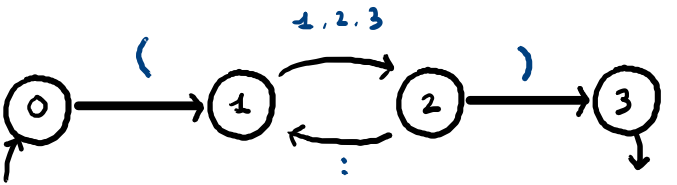
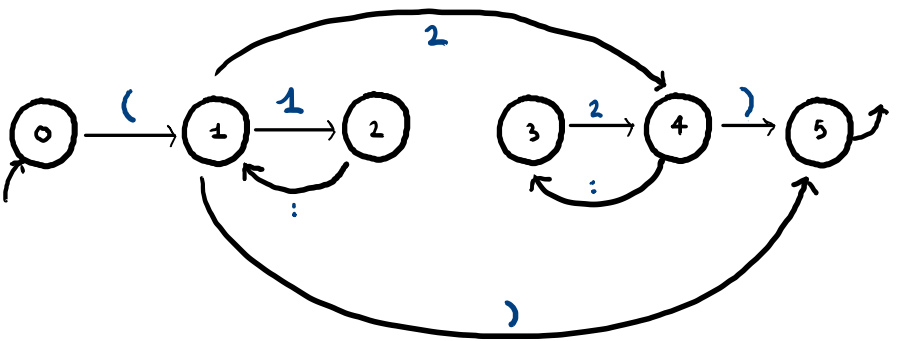
n° 1

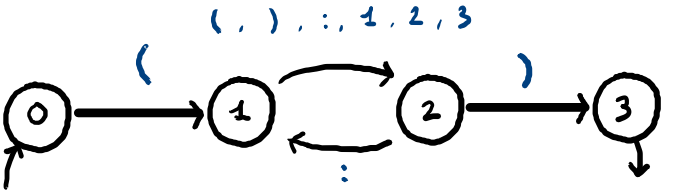
1.



2.



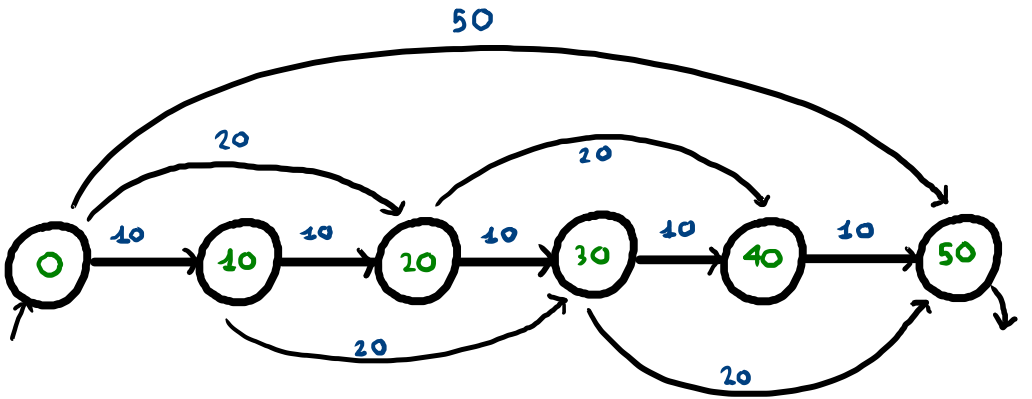
3.



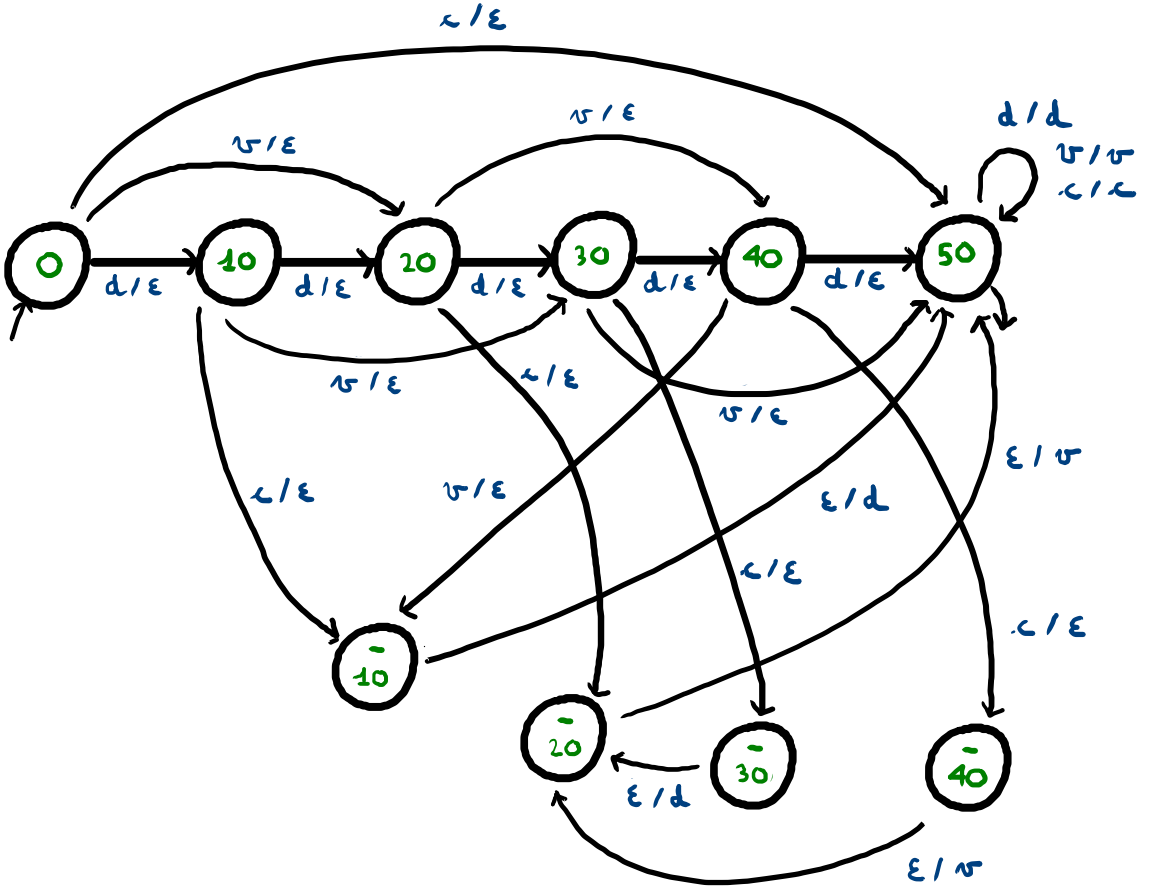
4. impossible avec une mémoire finie

n°2

1 .

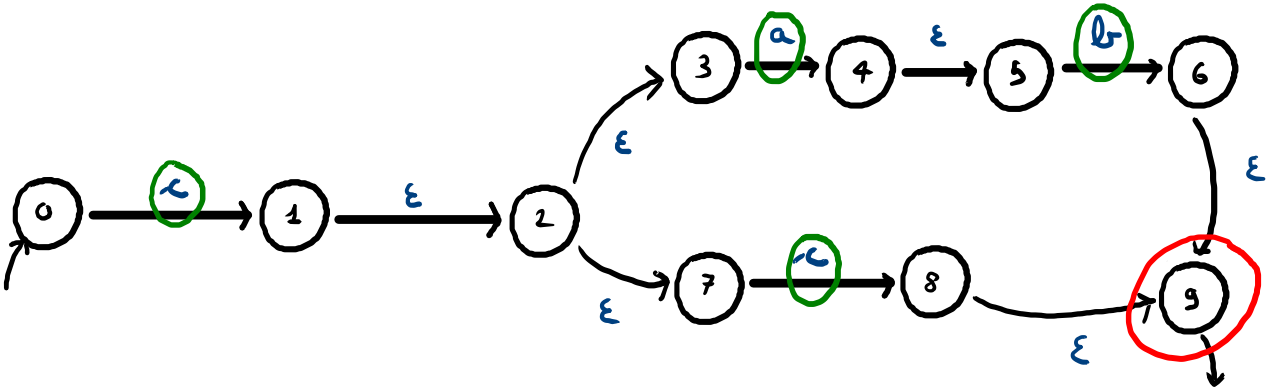


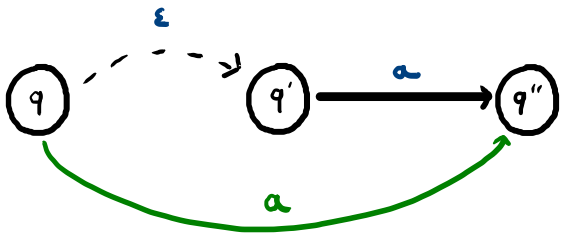
2 .



n° 3

1. $c\ (ab + c)$



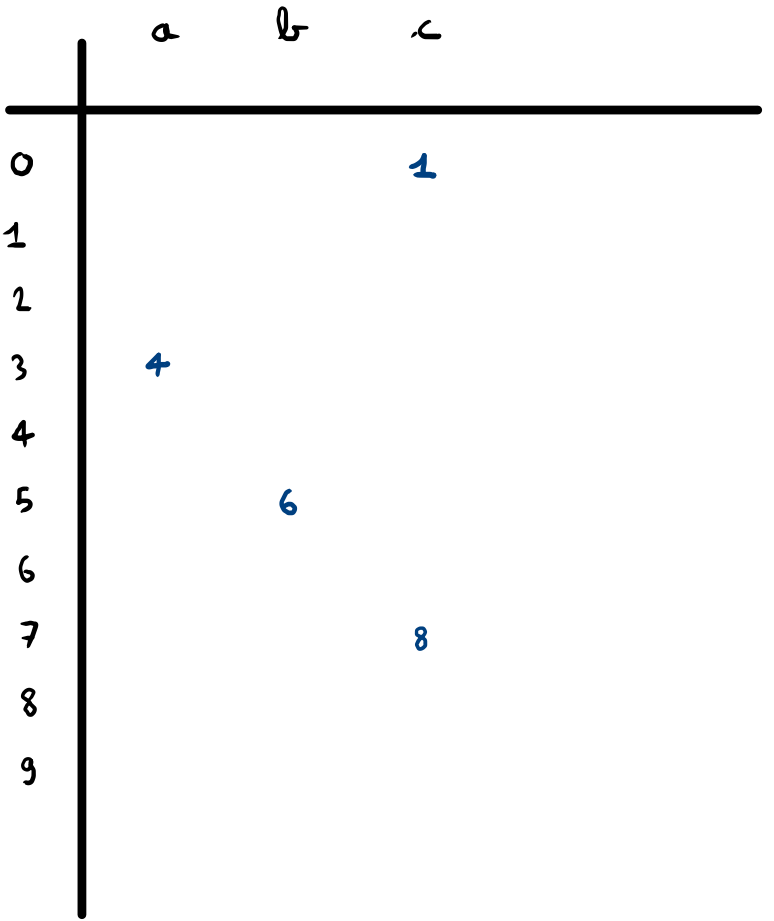


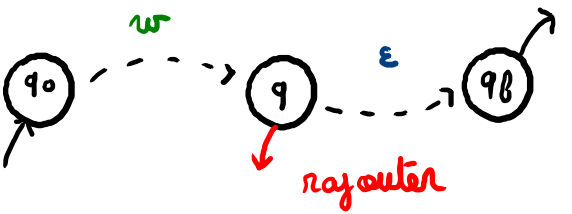
élimination arrière des ε - transitions

calcul de l'ε - fermeture

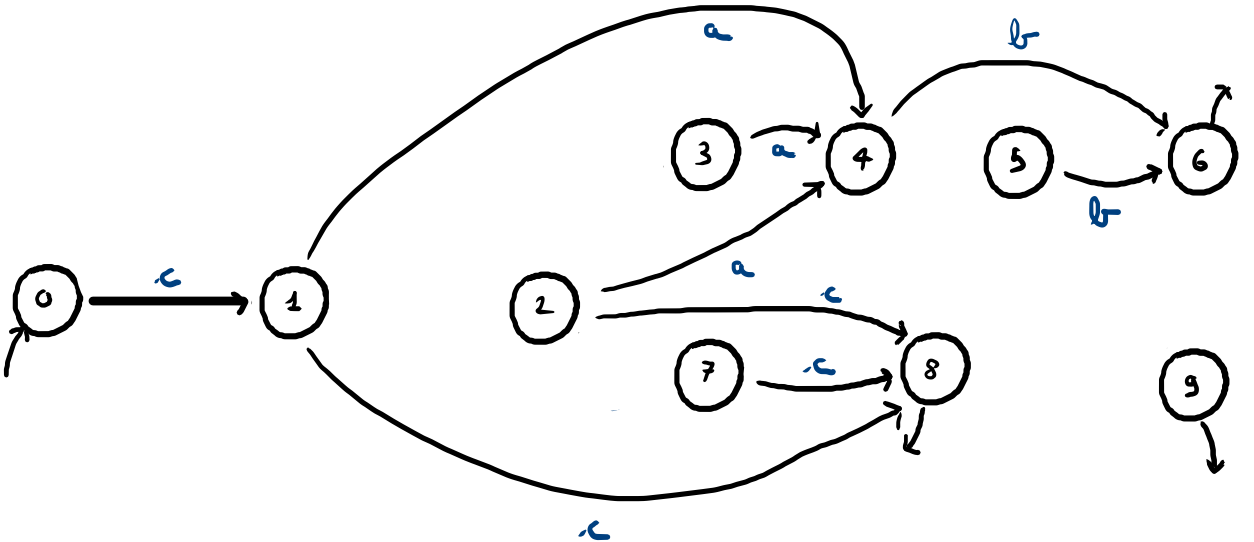
$q \xrightarrow[R]{\varepsilon}{}^{*} q'$ et $q' \xrightarrow[R]{\varepsilon}{}^{*} q''$ alors $q \xrightarrow[R]{\varepsilon}{}^{*} q''$

	1	2	3 = 2 = fermeture
0	0	0	0
1	1 2	1 2 3 7	1 2 3 7
2	2 3 7	2 3 7	2 3 7
3	3	3	3
4	4 5	4 5	4 5
5	5	5	5
6	6 9	6 9	6 9
7	7	7	7
8	8 9	8 9	8 9
9	9	9	9

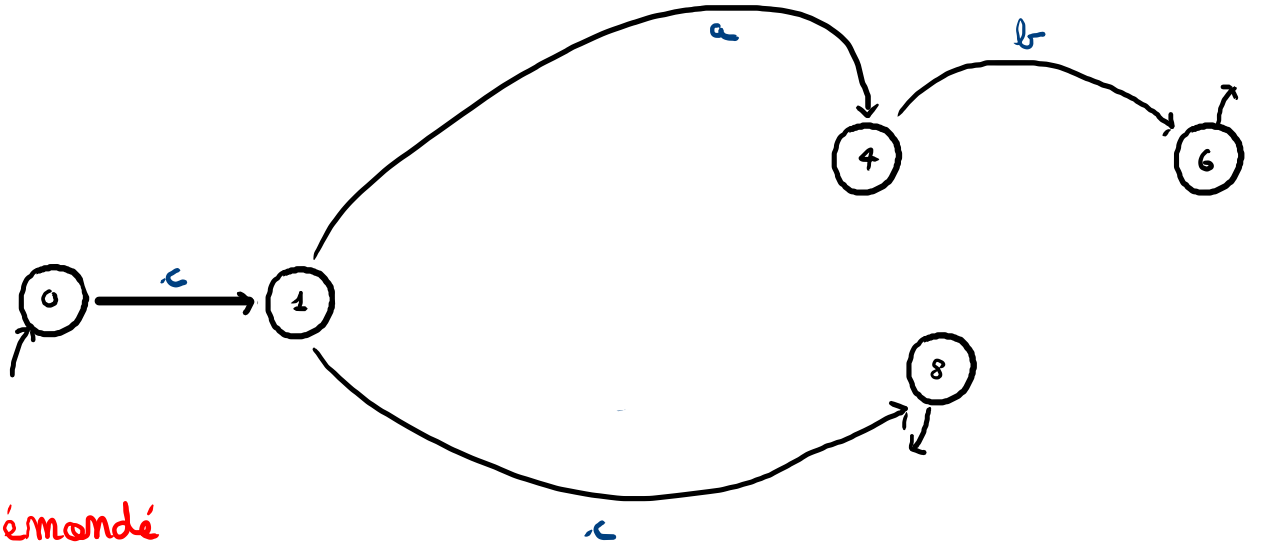

a
b
c
0
1
2
3
4
5
6
7
8
9
1
4
6
8


w
ε
q0
q
qf
rajouter

c (ab + c)



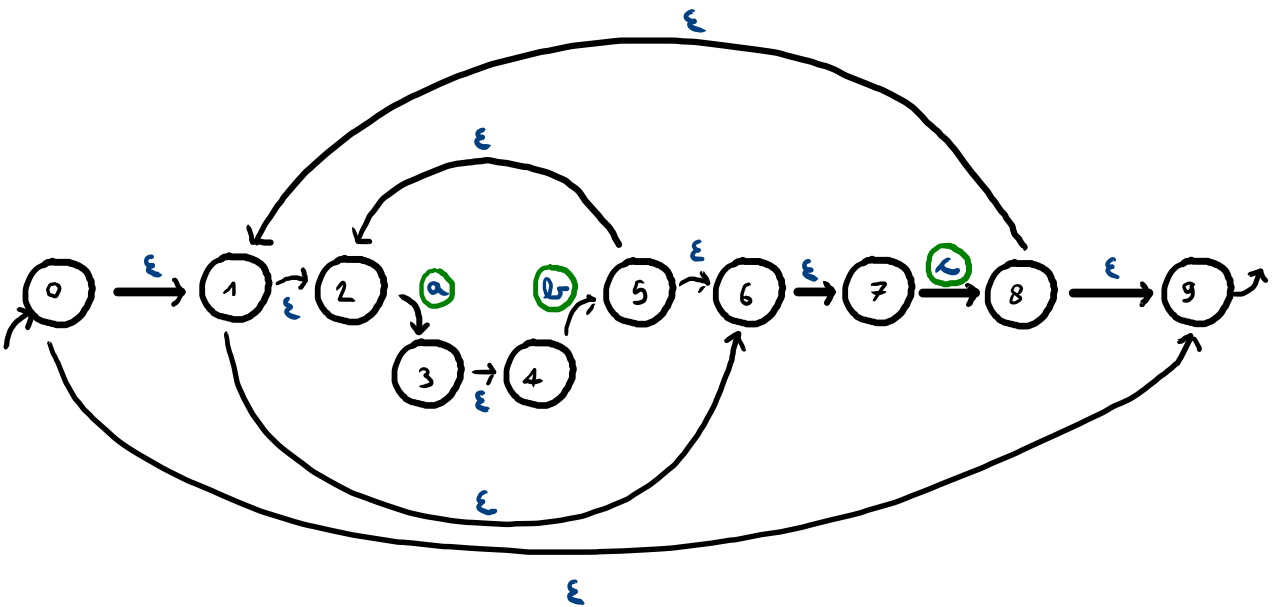
c (ab + c)



émondé

3. $((ab + \varepsilon)^* c)^*$

$= ((ab)^* c)^*$

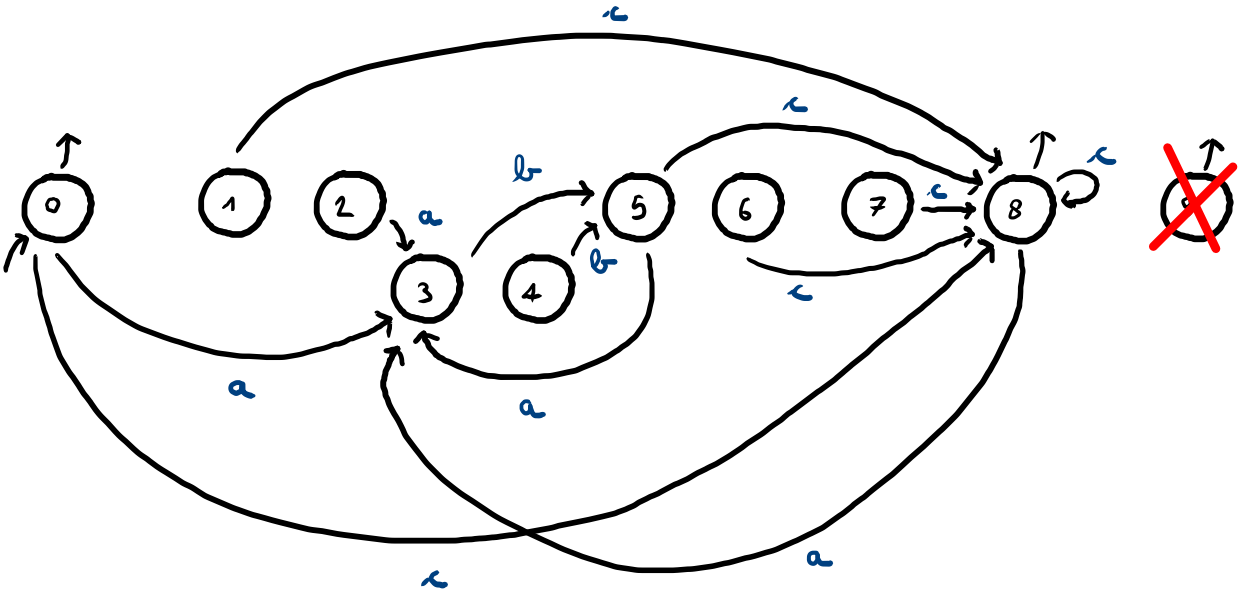


	1	2	3	4 ✓
0	0 1 9	0 1 9 2 6	0 1 9 2 6 7	0 1 9 2 6 7
1	1 2 6	1 2 6 7	1 2 6 7	1 2 6 7
2	2	2	2	2
3	3 4	3 4	3 4	3 4
4	4	4	4	4
5	5 6 2	5 6 2 7	5 6 2 7	5 6 2 7
6	6 7	6 7	6 7	6 7
7	7	7	7	7
8	8 9 1	8 9 1 2 6	8 9 1 2 6 7	8 9 1 2 6 7
9	9	9	9	9

	a	b	c
0			
1			
2	3		
3			
4		5	
5			
6			
7			8
8			
9			

$$((ab + \varepsilon)^* \cdot \varepsilon)^*$$

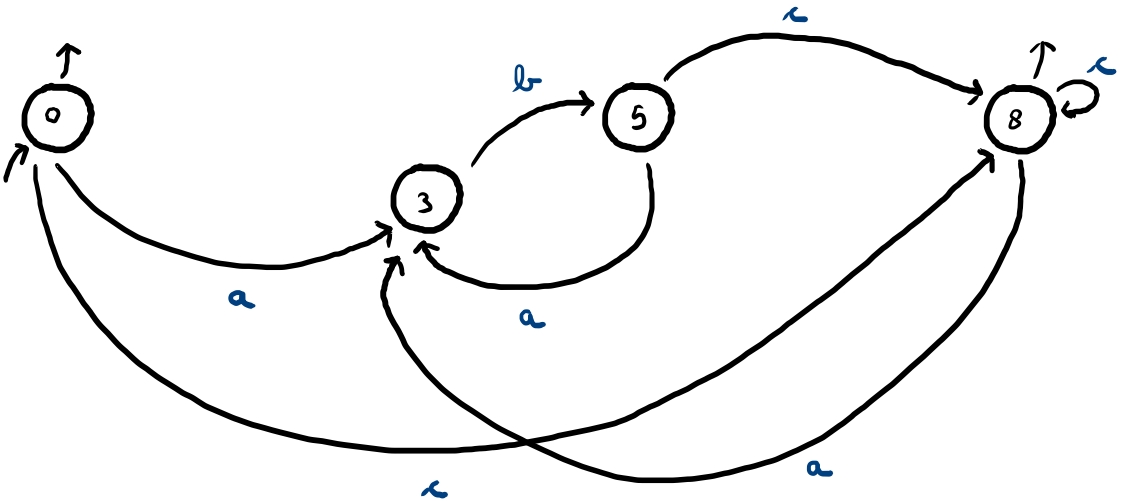
$$= ((ab)^* \varepsilon)^*$$



$$((ab + \varepsilon)^* . c)^*$$

$$= ((ab)^* c)^*$$

émondé



2. 16 états, résultat :