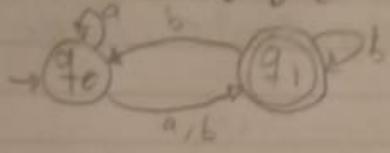
2- Encontrar el AFD mínimo equivalente a cada uno de los AFNs siguientes.

a)



Δ	a	b
→q0	{q0, q1}	{q1}
*q1	∅	{q0, q1}

S	a	b
→[q0]	[q0, q1]	[q1]
*[q0 q1]	[q0, q1]	[q0 q1]
*[q1]	[∅]	[q0 q1]
[∅]	[∅]	[∅]

S	a	b
→P0	P2	P3
*P2	P2	P0
*P3	P4	P2
P4	P4	P0

A mínimo de
$C_1 = \{P_2, P_3\}$, $C_2 = \{P_1, P_4\}$

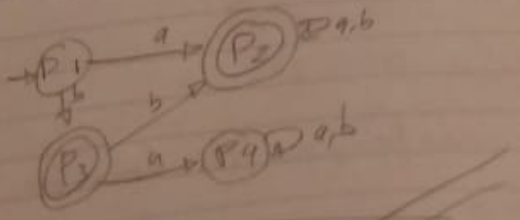
C_1

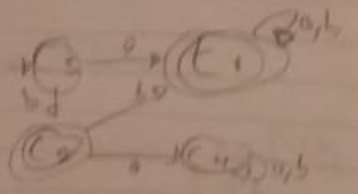
S	a	b				
*P2	P2	P2	1,1	1,1	1,1	C1
*P3	P4	P2	2,1	4,1	4,1	C2

C_2

S	a	b				
→P1	P2	P3	1,1	1,2	1,2	C3
P4	P4	P4	0,2	4,4	4,4	C4

$C_1 = \{P_0\}$, $C_2 = \{P_3\}$, $C_3 = \{P_1\}$, $C_4 = \{P_4\}$





b)

Δ	∅	1
→q0	{q0, q1}	{q1}
q1	{q2}	∅
*q2	∅	{q1}

δ	0	1
→[q0]	[q0, q1]	[q1]
[q0 q1]	[q0 q1, q2]	[q1]
*[q0 q1 q2]	[q0 q1, q0]	[q1]
[q1]	[q2]	[∅]
*[q2]	[∅]	[q1]
[∅]	[∅]	[∅]

S	0	1
→P0	P1	P3
P1	P2	P3
*P2	P2	P3
P3	P4	P5
*P4	P5	P3
P5	P5	P5

C1

S	0	1
→P0	P2	P3
*P4	P5	P3

C2

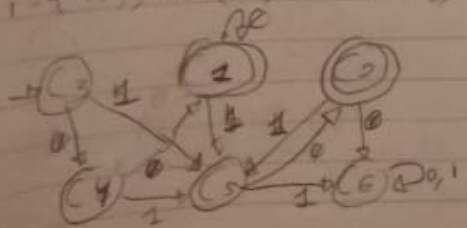
S	0	1
→P0	P1	P2
P1	P2	P3
P3	P4	P5
P5	P5	P5

C1 = {P2 P4}, C2 = {P0 P1 P3 P5}

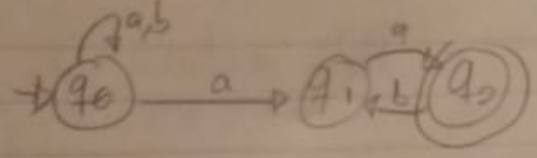
1,2	1,4	1,5	1,5	C1*
2,2	3,4	4,5	4,5	C2

2,2	4,4	4,5	4,5	C3*
1,2	1,4	1,5	1,5	C4
1,2	2,3	2,5	2,5	C5
2,2	3,3	5,5	5,5	*C5

C1 = {P0}, C2 = {P4}, C3 = {P0 P5}, C4 = {P1 P3}
*C1 = {P2}, C2 = {P4}, C3 = {P0}, C4 = {P1}, C5 = {P3}, C6 = {P5}
*C1 = {P2}, C2 = {P4}, C3 = {P0}, C4 = {P1}, C5 = {P3}, C6 = {P5}



c)



Δ	a	b
→ q_0	$\{q_0, q_1\}$	$\{q_0\}$
q_1	$\{q_2\}$	$\emptyset$
* q_2	$\emptyset$	$\{q_1\}$

S	a	b
→ $[q_0]$	$[q_0, q_1]$	$[q_0]$
$[q_0 q_1]$	$[q_0 q_1 q_2]$	$[q_0]$
* $[q_0 q_1 q_2]$	$[q_0, q_1, q_2]$	$[q_0, q_1]$

S	a	b
→ P_0	P_1	P_0
P_1	P_2	P_0
* P_2	P_2	P_1

$C_1 = \{P_2\}$, $C_2 = \{P_0, P_1\}$

C_1

S	a	b			
* P_2	P_2	P_1	1,2	1,3	* C_1

C_2

S	a	b			
→ P_0	P_1	P_0	2,2	3,2	* C_2
P_1	P_2	e	1,2	1,2	C_3

$C_1 = \{P_2\}$, $C_2 = \{P_0\}$, $C_3 = \{P_1\}$