

LISTA 9

1º)

F	a	b
q ₀	NF	NF
q ₂	NF	NF

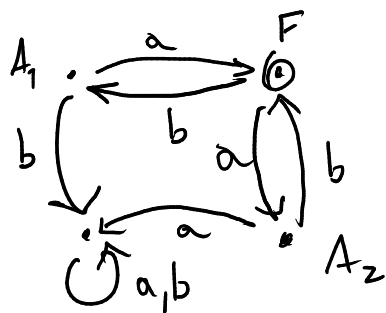
NF	a	b
q ₁	NF	F
q ₃	F	NF
q ₄	F	NF
q ₇	NF	NF

A ₁	a	b
q ₃	F	R
q ₄	F	R

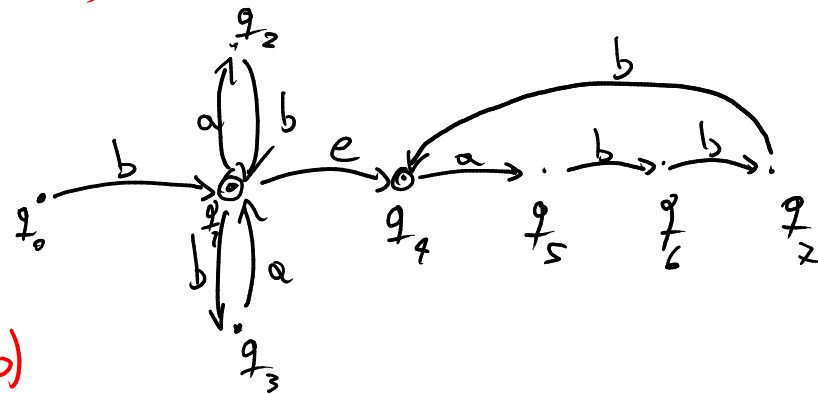
A ₂	a	b
q ₁	R	F

R	a	b
q ₇	R	R

F	a	b
q ₀	A ₂	A ₁
q ₂	A ₂	A ₁



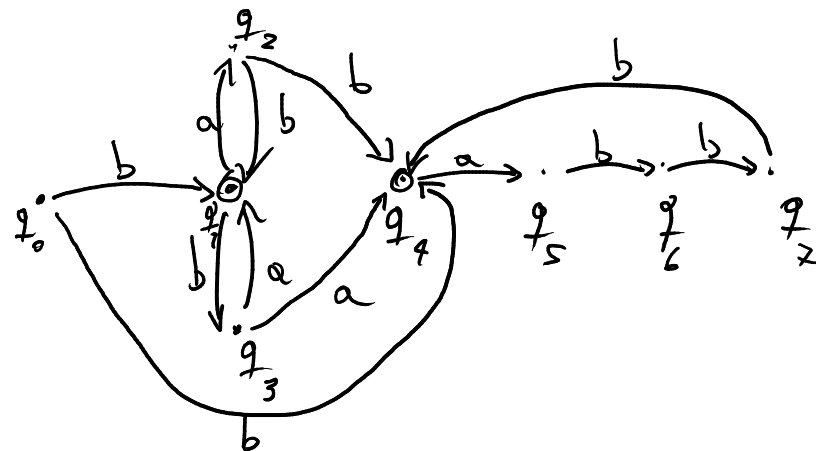
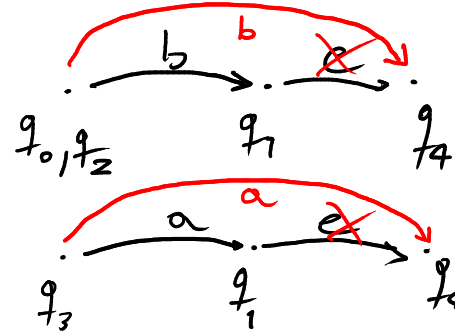
2º) a)



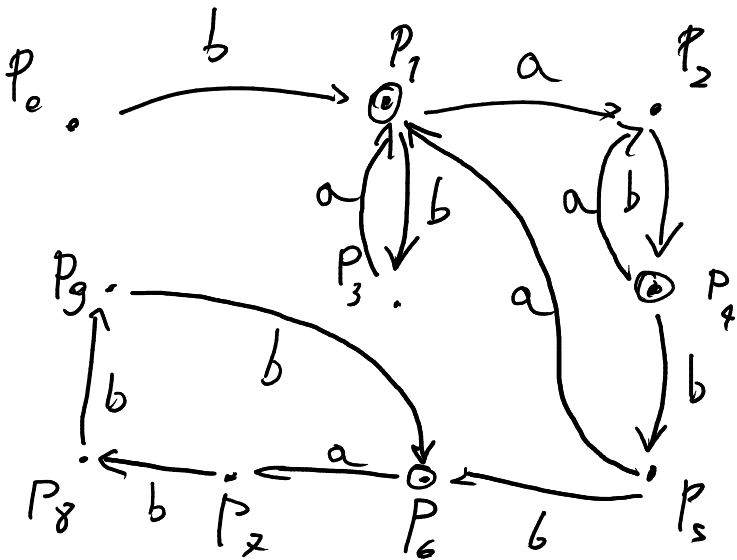
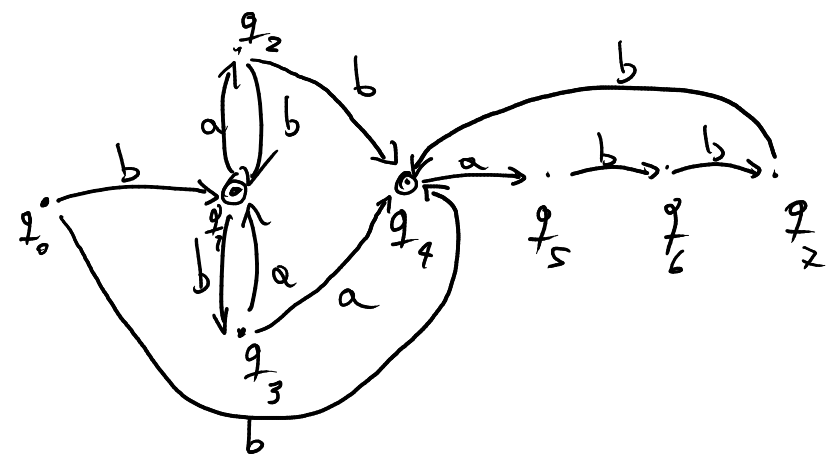
b)

Eliminação dos e's

Caso 1, primeira regra



Conversão para AFD



	a	b
$p_0 \{q_0\}$	\emptyset	$\{q_1, q_4\}$
$p_1 \{q_1, q_4\}$	$\{q_2, q_5\}$	$\{q_3\}$
$p_2 \{q_2, q_5\}$	\emptyset	$\{q_1, q_4, q_6\}$
$p_3 \{q_3\}$	$\{q_1, q_4\}$	\emptyset
$p_4 \{q_1, q_4, q_6\}$	$\{q_2, q_5\}$	$\{q_3, q_7\}$
$p_5 \{q_3, q_7\}$	$\{q_1, q_4\}$	$\{q_4\}$
$p_6 \{q_4\}$	$\{q_5\}$	\emptyset
$p_7 \{q_5\}$	\emptyset	$\{q_6\}$
$p_8 \{q_6\}$	\emptyset	$\{q_7\}$
$p_9 \{q_7\}$	\emptyset	$\{q_4\}$

c)

F	a	b
p_1	NF	NF
p_4	NF	NF
p_6	NF	NF

NF	a	b
p_0	NF	F
p_2	NF	F
p_3	F	NF
p_5	F	F
p_7	NF	NF
p_8	NF	NF
p_9	NF	F
p_{12}	NF	NF

F	a	b
P ₁	A ₁	A ₂
P ₄	A ₁	A ₃
P ₆	A ₄	A ₄

A ₁	a	b
P ₂	A ₄	F
P ₂	A ₄	F
P ₃	A ₄	F

A ₂	a	b
P ₃	F	A ₄

A ₃	a	b
P ₅	F	F

A ₄	a	b
P ₇	A ₄	A ₄
P ₈	A ₄	A ₁
P ₁₁	A ₄	A ₄

⇓

B ₀	a	b
P ₁	B ₃	B ₄

B ₁	a	b
P ₄	B ₃	B ₅

B ₂	a	b
P ₆	B ₆	B ₆

B ₄	a	b
P ₃	B ₀	B ₆

B ₅	a	b
P ₅	B ₀	B ₂

B ₃	a	b
P ₀	B ₆	B ₀
P ₂	B ₆	B ₁
P ₉	B ₆	B ₂

B ₆	a	b
P ₂	B ₆	B ₂
P ₁₁	B ₆	B ₆

B ₇	a	b
P ₈	B ₆	B ₃

Não foi possível minimizar este autômato. Esse é o autômato mais simplificado possível.