Linguagens e Programação

Autómatos Finitos

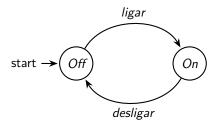
Instituto Superior de Engenharia do Porto

2021/2022

O que é um autómato Finito (AF)?

Definição de AF

Um **autómato finito** ou **máquina de estados**, é um formalismo, que permite representar de forma clara, um qualquer processo composto por um conjunto de estados, e transições entre esses estados.



Formalmente um autómato finito (AF) é representado por um tuplo:

$$A = (S, \Sigma, s_0, F, \delta)$$

• S é um conjunto finito de estados não vazio;

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- ullet Σ é o alfabeto de entrada, um conjunto finito de símbolos não vazio;

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- F é conjunto de estados finais. F é um subconjunto de S;

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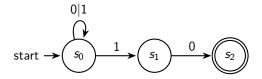
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- \bullet Σ é o alfabeto de entrada, um conjunto finito de símbolos não vazio;
- s₀ é o estado inicial, um elemento de S;
- F é conjunto de estados finais. F é um subconjunto de S;
- δ é a função de transição, recebe como argumentos:
 - um estado
 - um símbolo de entrada
 - e devolve um novo estado (eventualmente o mesmo):

$$\delta: s imes a o T$$
 ou $\delta(s,a) = T, \ {\sf com} \ s \in S \wedge a \in \Sigma \wedge T \subseteq S$

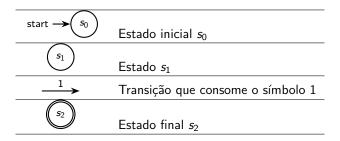
Representação gráfica de um autómato Finito

Considere um AF capaz de processar números binários terminados em "10", equivalente à expressão regular "(0|1)*10"

O AF pode ser representado graficamente:



em que:



Representação formal de um autómato Finito e Tabela de Transições

Considere um AF capaz de processar números binários terminados em "10", equivalente à expressão regular "(0|1)*10"

$$A = \left(\left\{s_0, s_1, s_2\right\}, \left\{0, 1\right\}, s_0, \left\{s_2\right\}, \delta\right)$$

onde,

$$\delta(s_0, 0) = \{s_0\}$$

 $\delta(s_0, 1) = \{s_0, s_1\}$
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Representação formal de um autómato Finito e Tabela de Transições

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 $\delta(s_1, 0) = \{s_2\}$

Um AF também pode ser representado por uma tabela de transições:

	0	1
\rightarrow s_0	{ <i>s</i> ₀ }	$\{s_0, s_1\}$
s_1	$\{s_2\}$	Ø
* <i>s</i> ₂	Ø	Ø

Função de transição estendida

Função de transição estendida 1 - $\hat{\delta}$: calcula o conjunto de estados atingíveis a partir de um dado estado, após processar uma sequência de símbolos do alfabeto.

¹Jeffrey D. Ullman, E. Hopcroft, Rajeev Motwani, Introduction to Automata Theory, Languages, and Computation, Addison-Wesley, 2nd Edition, 2001.

Função de transição estendida

Função de transição estendida - $\hat{\delta}$: calcula o conjunto de estados atingíveis a partir de um dado estado, após processar uma sequência de símbolos do alfabeto.

$$\begin{array}{c|c|c|c}
 & \parallel & 0 & 1 \\
\hline
 \rightarrow s_0 & \mid & \{s_0\} & \mid \{s_0, s_1\} \\
 s_1 & \mid & \{s_2\} & \mid \emptyset \\
 *s_2 & \mid & \emptyset & \mid \emptyset
\end{array}$$

$$\begin{split} \hat{\delta}(s_0, 10011) &= \delta(s_0, 1) \cup \delta(s_1, 1) \\ &= \{s_0, s_1\} \cup \emptyset \\ &= \{s_0, s_1\} \end{split}$$

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Validação de uma frase através de um AF

No processamento de uma frase por um AF acontece uma das seguintes situações:

- Após processar o último símbolo está num estado final: o autómato pára e a frase é aceite;
- Após processar o último símbolo está num estado não final: o autómato pára e a frase rejeitada;
- O autómato está num estado em que para o símbolo seguinte não existe função de transição: o autómato pára e a frase rejeitada;

Classificação de Autómatos

Um autómato finito diz-se **determinístico** (**AFD**) se, em cada um dos seus estados e perante um símbolo, puder transitar para um único estado, *i.e.*,

$$\forall s_1, s_2, s_3, a : \delta(s_1, a, s_2) \in \delta \land \delta(s_1, a, s_3) \in \delta \rightarrow s_2 = s_3$$

$$Nota : \delta(s_1, a, s_2) \Leftrightarrow \delta(s_1, a) = \{s_2\}$$

Caso contrário, diz-se não determinístico (AFN).

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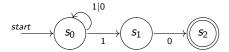
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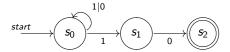
Comparação entre AFD e AFN:

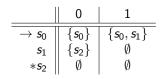
- Os AFD são mais rápidos (tempo de computação) que os AFN;
- Os AFN ocupam muito menos espaço (têm menos estados) que os AFD;
- Um AFD é um caso particular de AFN em que para qualquer estado K e qualquer símbolo de entrada x, só pode haver uma transição a partir de K.

• autómato Finito não Determinístico

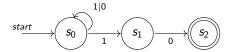


autómato Finito não Determinístico



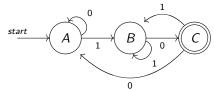


• autómato Finito não Determinístico

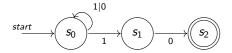




autómato Finito Determinístico

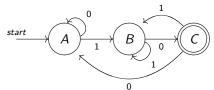


• autómato Finito não Determinístico





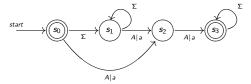
autómato Finito Determinístico



	0	1
$\rightarrow A$	Α	В
В	C	В
*C	A	В

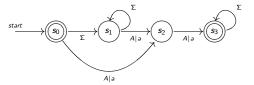
• autómato Finito não Determinístico

$$\Sigma = \{\textit{A}, \textit{B}, \textit{C}, \ldots, \textit{Z}, \textit{a}, \textit{b}, \textit{c}, \ldots, \textit{z}\}$$



• autómato Finito não Determinístico

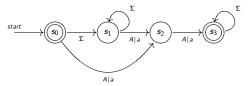
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	A, a	$\sum \setminus_{\{A,a\}}$
$\rightarrow *s_0$	$\{s_1, s_2\}$	{s ₁ }
s_1	$\{s_1, s_2\}$	$\{s_1\}$
<i>s</i> ₂	{ <i>s</i> ₃ }	Ø
* s 3	{ <i>s</i> ₃ }	{ <i>s</i> ₃ }

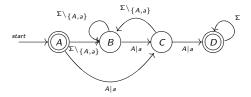
autómato Finito não Determinístico

$$\Sigma = \{\textit{A}, \textit{B}, \textit{C}, \dots, \textit{Z}, \textit{a}, \textit{b}, \textit{c}, \dots, \textit{z}\}$$



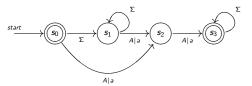
	A, a	$\Sigma \setminus_{\{A,a\}}$
$ o *s_0$	$\{s_1, s_2\}$	{s ₁ }
s_1	$\{s_1, s_2\}$	$\{s_1\}$
s ₂	{ s ₃ }	Ø
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autómato Finito Determinístico



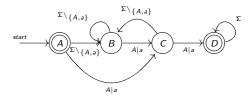
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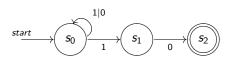


	A, a	$\sum \setminus_{\{A,a\}}$
$ o *s_0$	$\{s_1, s_2\}$	{s ₁ }
s_1	$\{s_1, s_2\}$	$\{s_1\}$
s ₂	{ <i>s</i> ₃ }	Ø
* s 3	{ s ₃ }	{ <i>s</i> ₃ }

autómato Finito Determinístico



	A, a	$\Sigma ackslash_{\{A,a\}}$
$\rightarrow *A$	С	В
В	С	В
С	D	В
*D	D	D



$$A=(\{s_0,s_1,s_2\},\{0,1\},s_0,\{s_2\},\delta)$$
 onde, $\delta(s_0,0)=\{s_0\}$

 $\delta(s_0, 1) = \{s_0, s_1\}$ $\delta(s_1, 0) = \{s_2\}$

 $A = (\{s_0, s_1, s_2\}, \{0, 1\}, s_0, \{s_2\}, \delta)$ onde, $\delta(s_0, 0) = \{s_0\}$ $\delta(s_0, 1) = \{s_0, s_1\}$ $\delta(s_1, 0) = \{s_2\}$

$$\hat{\delta}(\mathbf{s}_0, \varepsilon) = \{\mathbf{s}_0\}$$
 $\hat{\delta}$ é a função de transição estendida

	0	1
$ o$ $ extstyle s_0 \ extstyle s_1 \ extstyle *s_2 \ extstyle $	$\{s_0\}$ $\{s_2\}$	$\{s_0, s_1\}$

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 onde, $\delta(s_0,0)=\{s_0\}$ $\delta(s_0,1)=\{s_0,s_1\}$

 $\delta(s_1,0) = \{s_2\}$

$$\begin{split} \hat{\delta}(s_0,\varepsilon) &= \{\textbf{s}_0\} \quad \hat{\delta} \text{ \'e a função de transição estendida} \\ \hat{\delta}(\textbf{s}_0,1) &= \delta(\textbf{s}_0,1) = \{\textbf{s}_0,s_1\} \end{split}$$

	0	1
\rightarrow s_0	{ <i>s</i> ₀ }	$\{s_0,s_1\}$
s_1	$\{s_0\}$ $\{s_2\}$	Ø
* <i>s</i> ₂	Ø	Ø

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	0	1
\rightarrow s_0	{ <i>s</i> ₀ }	$\{s_0,s_1\}$
s_1	$\{s_0\}$ $\{s_2\}$	Ø
* <i>s</i> ₂	Ø	Ø

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	0	1
\rightarrow s_0	$\{s_0\}$ $\{s_2\}$	$\{s_0,s_1\}$
<i>s</i> ₁ * <i>s</i> ₂	{ <i>s</i> ₂ } ∅	Ø

$$A=\big(\{s_0,s_1,s_2\},\{0,1\},s_0,\{s_2\},\delta\big)$$
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	0	1
\rightarrow s ₀	{ <i>s</i> ₀ }	$\{s_0, s_1\}$
s_1	$\begin{cases} s_0 \\ s_2 \end{cases}$	Ø
* <i>s</i> ₂	Ø	Ø

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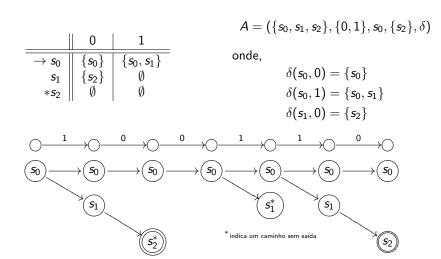
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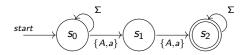


Exercícios sobre AF

- Defina um **autómato finito** que reconheça as seguintes linguagens, usando $\Sigma = \{0,1\}$:
 - Sequência com sufixo 1
 - Sequência com prefixo 1
 - Sequência que começa com 1 e termina em 0
 - Sequência que contém dois 1s
 - Sequência que contém pelos menos três 1s e um 0
 - Sequência que contém o factor 01
 - Sequência que começa e termina com o mesmo algarismo
- Classifique cada um dos autómatos como AFD ou AFN.

Conversão formal de AFNs em AFDs (simplificada)

	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$
$ ightarrow s_0$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
s_1	{ <i>s</i> ₂ }	Ø
* s 2	{ s ₂ }	$\{s_2\}$



Conversão formal de AFNs em AFDs (simplificada)

				$\{A,a\}$	$\Sigma \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
$\rightarrow s_0$	$\{s_0, s_1\}$	$\{s_0\}$			
$egin{array}{c} ightarrow s_0 \ s_1 \ *s_2 \end{array}$	$\begin{cases} s_0, s_1 \\ s_2 \end{cases}$	Ø			
* <i>s</i> ₂	$\{s_2\}$	$\{s_2\}$			

1. Copiar estado inicial

				$\{A,a\}$	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
\rightarrow s_0	$\{s_0, s_1\}$	{ <i>s</i> ₀ }	$egin{array}{l} ightarrow \{s_0\} \ \{s_0,s_1\} \end{array}$		
$ ightarrow s_0 \ s_1 \ *s_2$	$\begin{cases} s_0, s_1 \\ s_2 \end{cases}$	Ø			
* s 2	{s ₂ }	{ s ₂ }			

				$\{A,a\}$	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$\rightarrow \{s_0\}$	$\{s_0,s_1\}$	{ <i>s</i> ₀ }
$ o$ s_0	$\{s_0, s_1\}$	{ <i>s</i> ₀ }	$\{s_0,s_1\}$	$\{s_0, s_1, s_2\}$	$\{s_0\}$
$ ightarrow s_0 \ s_1$	$\begin{cases} s_0, s_1 \\ s_2 \end{cases}$	Ø			
* s 2	{ <i>s</i> ₂ }	$\{s_2\}$			

				A, a	$\sum \setminus_{\{A,a\}}$
	{ <i>A</i> , <i>a</i> }	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
\rightarrow s_0	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0,s_1\}$	$\{s_0, s_1, s_2\}$	{ <i>s</i> ₀ }
<i>s</i> ₁	{ <i>s</i> ₂ }	Ø	$*\{s_0,s1,s_2\}$		
* s 2	{ s ₂ }	$\{s_2\}$			

				$\{A,a\}$	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
$ o$ s_0	$\{s_0, s_1\}$	{ <i>s</i> ₀ }	$\{s_0,s_1\}$	$\{s_0, s_1, s_2\}$	$\{s_0\}$
s_1	{ <i>s</i> ₂ }	Ø	$*\{s_0,s1,s_2\}$	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$
* s 2	{ <i>s</i> ₂ }	$\{s_2\}$			

				A, a	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
$ o$ s_0	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0,s_1\}$	$\{s_0, s_1, s_2\}$	$\{s_0\}$
s_1	{ s ₂ }	Ø	$*\{s_0,s1,s_2\}$	$\{s_0, s_1, s_2\}$	$\{s_0,s_2\}$
* <i>s</i> ₂	{ s ₂ }	$\{s_2\}$	$*\{s_0,s_2\}$		

				A, a	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$	$\{s_0, s_1\}$	{ <i>s</i> ₀ }
$ o s_0$	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0,s_1\}$	$\{s_0, s_1, s_2\}$	$\{s_0\}$
s_1	{ s ₂ }	Ø	$*\{s_0,s1,s_2\}$	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$
* <i>s</i> ₂	$\{s_2\}$	$\{s_2\}$	$*\{s_0,s_2\}$	$ \{s_0, s_1, s_2\}$	$\{s_0, s_2\}$

				$\{A,a\}$	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$ A	$\{s_0, s_1\}$	$\{s_0\}$
$ o$ s_0	$\{s_0, s_1\}$	{ <i>s</i> ₀ }	$\{s_0, s_1\}$ B	$\{s_0, s_1, s_2\}$	$\{s_0\}$
s_1	$\{s_2\}$	Ø	$*\{s_0, s_1, s_2\}$ C	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$
* s 2	$\{s_2\}$	$\{s_2\}$	$*\{s_0, s_2\} \ D$	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$

3. Criar um novo nome para cada estado

				A, a	$\sumackslash_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$ A	$\{s_0, s_1\}$	$\{s_0\}A$
$ o$ s_0	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0, s_1\}$ B	$\{s_0, s_1, s_2\}$	$\{s_0\}A$
s_1	{ <i>s</i> ₂ }	Ø	$*\{s_0, s_1, s_2\}$ C	$\{s_0, s_1, s_2\}$	$\{s_0,s_2\}$
* s 2	{ <i>s</i> ₂ }	{ s ₂ }	$*\{s_0, s_2\} D$	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$

				A, a	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$\rightarrow \{s_0\}$ A	$\{s_0, s_1\}$ B	{ <i>s</i> ₀ }A
$ o$ s_0	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0, s_1\}$ B	$\{s_0, s_1, s_2\}$	$\{s_0\}A$
s_1	$\{s_2\}$	Ø	$*\{s_0, s_1, s_2\}$ C	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$
* s 2	{ <i>s</i> ₂ }	$\{s_2\}$	$*\{s_0, s_2\} D$	$\{s_0, s_1, s_2\}$	$\{s_0, s_2\}$

				A, a	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ o \{s_0\}$ A	$\{s_0, s_1\}B$	{ <i>s</i> ₀ }A
$ o$ s_0	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0, s_1\}$ B	$\{s_0, s_1, s_2\}$ C	$\{s_0\}A$
s_1	{ <i>s</i> ₂ }	Ø	$*\{s_0, s_1, s_2\}$ C	$\{s_0, s_1, s_2\}$ C	$\{s_0, s_2\}$
* s 2	{ <i>s</i> ₂ }	$\{s_2\}$	$*\{s_0, s_2\} D$	$\{s_0, s_1, s_2\}$ C	$\{s_0, s_2\}$

				A, a	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$ A	$\{s_0, s_1\}B$	$\{s_0\}A$
$ o$ s_0	$\{s_0, s_1\}$	{ <i>s</i> ₀ }	$\{s_0, s_1\}$ B	$\{s_0, s_1, s_2\}C$	{ <i>s</i> ₀ }A
s_1	{ <i>s</i> ₂ }	Ø	$*\{s_0, s_1, s_2\}$ C	$\{s_0, s_1, s_2\}C$	$\{s_0,s_2\}$ D
* <i>s</i> ₂	{ <i>s</i> ₂ }	$\{s_2\}$	$*\{s_0, s_2\} \ D$	$\{s_0, s_1, s_2\}C$	$\{s_0,s_2\}$ D

				$\{A,a\}$	$\sum \setminus_{\{A,a\}}$
	$\{A,a\}$	$\sum \setminus_{\{A,a\}}$	$ ightarrow \{s_0\}$ A	$\{s_0, s_1\}B$	{ <i>s</i> ₀ }A
$ o$ s_0	$\{s_0, s_1\}$	$\{s_0\}$	$\{s_0, s_1\}$ B	$\{s_0, s_1, s_2\}C$	$\{s_0\}A$
s_1	{ <i>s</i> ₂ }	Ø	$*\{s_0, s_1, s_2\}$ C	$\{s_0, s_1, s_2\}$ C	$\{s_0,s_2\}D$
* s 2	{ <i>s</i> ₂ }	$\{s_2\}$	$*\{s_0, s_2\} D$	$\{s_0, s_1, s_2\}$ C	$\{s_0,s_2\}D$

5. Eliminar nomes antigos

	$\{A,a\}$	$\Sigma \setminus_{\{A,a\}}$
$\rightarrow A$	В	Α
В	С	Α
*C	С	D
*D	С	D

	0	1
\rightarrow s_0	<i>s</i> ₀	s_1
s_1	s ₂	s_1
* <i>s</i> ₂	<i>s</i> ₀	<i>S</i> ₃
<i>s</i> ₃	s ₂	s 3

	0	1		0	1
$\rightarrow s_0$	<i>s</i> ₀	<i>s</i> ₁	$egin{pmatrix} ightarrow s_0 \ s_1 \ s_3 \end{matrix}$	s ₀	s ₁
s_1	<i>s</i> ₂	<i>s</i> ₁	s_1	s ₂	<i>s</i> ₁
* <i>s</i> ₂	<i>s</i> ₀	s 3	<i>s</i> ₃	s ₂	<i>s</i> ₃
$ ightarrow s_0 \ s_1 \ *s_2 \ s_3$	<i>s</i> ₂	s ₃	* <i>s</i> ₂		<i>s</i> ₃

1. Dividir a tabela em 2 grupos: estados finais e estados não finais

	0	1	_			0	1
$egin{array}{c} ightarrow s_0 \ s_1 \ *s_2 \ s_3 \ \end{array}$	<i>s</i> ₀	s_1			$egin{array}{c} ightarrow extit{s}_0 \ extit{s}_1 \ extit{s}_3 \end{array}$	<i>s</i> ₀	<i>s</i> ₁
s_1	s ₂	s_1		Α	s_1	<i>s</i> ₂	s_1
* s 2	<i>s</i> ₀	<i>s</i> ₃			<i>s</i> ₃	<i>s</i> ₂	<i>s</i> ₃
<i>s</i> ₃	s ₂	s ₃		В	* s 2	<i>s</i> ₀	s ₃

2. Identificar cada um dos grupos com um símbolo (letra ou algarismo)

	0		_			0	
$egin{array}{c} ightarrow s_0 \ s_1 \ *s_2 \ s_3 \end{array}$	<i>s</i> ₀	<i>s</i> ₁	-		$egin{array}{c} ightarrow s_0 \ s_1 \ s_3 \end{array}$	<i>s</i> ₀	s_1
s_1	s ₂	<i>s</i> ₁		Α	s_1	<i>s</i> ₂	<i>s</i> ₁
* <i>s</i> ₂	<i>s</i> ₀	5 3			<i>s</i> ₃	<i>s</i> ₂	<i>5</i> ₃
<i>s</i> ₃	s ₂	<i>s</i> ₃		В	* <i>s</i> ₂	<i>s</i> ₀	s ₃

		0	1
	\rightarrow s_0	s ₀ (A)	s ₁ (A)
Α	s_1	S ₀ (A) S ₂ (B) S ₂ (B)	s ₁ (A)
	<i>s</i> ₃	s_2 (B)	s ₃ (A)
В	* <i>s</i> ₂	<i>s</i> ₀	<i>5</i> ₃

3. Para cada um dos grupos com mais de 1 estado, identificar o grupo destino das transições

	0	1
$\rightarrow s_0$	<i>s</i> ₀	s_1
s_1	s ₂	s_1
* s 2	<i>s</i> ₀	s ₃
<i>s</i> ₃	s ₂	s 3
	0	1
$ o s_0$	0 s ₀	1 s ₁
$egin{array}{c c} \to s_0 & \\ \hline s_1 & \\ \hline \end{array}$		
	<i>s</i> ₀	<i>s</i> ₁

		0	1
	\rightarrow s_0	<i>s</i> ₀	<i>s</i> ₁
Α	s_1	s ₂	s_1
	<i>s</i> ₃	s ₂	<i>S</i> ₃
В	* <i>s</i> ₂	<i>s</i> ₀	s ₃

		0	1
	$\rightarrow s_0$	s ₀ (A) s ₂ (B) s ₂ (B)	s ₁ (A)
Α	s_1	s ₂ (B)	s ₁ (A)
	<i>s</i> ₃	s_2 (B)	s ₃ (A)
В	* <i>S</i> ₂	<i>s</i> ₀	s ₃

4. Subdividir grupos mantendo juntos apenas estados do mesmo grupo, com combinações iguais.

A ausência de transição conta como um grupo

	0	1
\rightarrow s_0	<i>s</i> ₀	s_1
s_1	<i>s</i> ₂	<i>s</i> ₁
* <i>s</i> ₂	<i>s</i> ₀	s 3
s ₃	s ₂	s 3
	0	1
$\rightarrow s_0$	0 s ₀	1 s ₁
$ o s_0 \ s_1$	<u> </u>	
	<i>s</i> ₀	<i>s</i> ₁

		0	1
	\rightarrow s_0	<i>s</i> ₀	s_1
Α	s_1	s ₂	s_1
	<i>s</i> ₃	<i>s</i> ₂	<i>S</i> ₃
В	* <i>s</i> ₂	<i>s</i> ₀	s ₃

		0	1
_	\rightarrow s_0	s ₀ (A) s ₂ (B) s ₂ (B)	s ₁ (A)
Α	s_1	s_2 (B)	s ₁ (A)
	<i>s</i> ₃	s_2 (B)	s ₃ (A)
В	* <i>s</i> ₂	<i>s</i> ₀	s 3

5. Se os grupos foram alterados, e ainda existem grupos com mais de um estado, voltar ao ponto **2**.

Se os grupos não foram alterados, ou só existem grupos com um estado, passar ao ponto ${\bf 6}$

	0	1	_			0	1
$\rightarrow s_0$	<i>s</i> ₀	<i>s</i> ₁	-		\rightarrow s_0	<i>s</i> ₀	<i>s</i> ₁
s_1	<i>s</i> ₂	s_1		Α	s_1	<i>s</i> ₂	s_1
* s 2	<i>s</i> ₀	<i>s</i> ₃			<i>s</i> ₃	<i>s</i> ₂	s ₃
<i>s</i> ₃	<i>s</i> ₂	<i>s</i> ₃		В	* <i>s</i> ₂	<i>s</i> ₀	s 3
1					i	i .	
	0	1	_			0	1
$ o s_0$	0 s ₀	1 s ₁	=	A	$\rightarrow s_0$	5 ₀	<i>s</i> ₁
$ o s_0 \ o s_1$		l	-		$ ightarrow s_0 \ s_1$		
	<i>s</i> ₀	<i>s</i> ₁	: -	A B		<i>s</i> ₀	s_1

		0	1
_	\rightarrow s_0	s ₀ (A) s ₂ (B) s ₂ (B)	s ₁ (A) s ₁ (A) s ₃ (A)
Α	s_1	s ₂ (B)	s ₁ (A)
	<i>s</i> ₃	s_2 (B)	s ₃ (A)
В	* <i>S</i> 2	<i>s</i> ₀	<i>S</i> ₃

3. Para cada um dos grupos com mais de 1 estado, identificar o grupo destino das transições

	0	1	_			0	1			0	1
$\rightarrow s_0$	<i>s</i> ₀	<i>s</i> ₁	-		\rightarrow s_0	<i>s</i> ₀	s_1		\rightarrow s_0	s ₀ (A)	s ₁ (A)
s_1	<i>s</i> ₂	s_1		Α	s_1	<i>s</i> ₂	s_1	Α	s_1	s ₂ (B)	s ₁ (A)
* <i>s</i> ₂	<i>s</i> ₀	s ₃	_		<i>s</i> ₃	<i>s</i> ₂	s 3		<i>s</i> ₃	s ₂ (B)	s ₃ (A)
<i>s</i> ₃	<i>s</i> ₂	s ₃		В	* <i>s</i> ₂	<i>s</i> ₀	5 3	В	* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃
	0	1				0	1			0	1
\rightarrow s_0	<i>s</i> ₀	s_1	-	Α	\rightarrow s_0	<i>s</i> ₀	<i>s</i> ₁	Α	\rightarrow s_0	<i>s</i> ₀	s_1
s_1	s ₂	s_1		В	s_1	<i>s</i> ₂	s_1	В	s_1	s_2 (C)	s_1 (B)
<i>s</i> ₃	<i>s</i> ₂	s ₃	_		<i>s</i> ₃	<i>s</i> ₂	s 3	Ь	<i>s</i> ₃	s ₂ (C)	s ₃ (B)
* s ₂	<i>s</i> ₀	s ₃		С	* s 2	<i>s</i> ₀	s 3	С	* <i>s</i> ₂	<i>s</i> ₀	s 3

4. Subdividir grupos mantendo juntos apenas estados do mesmo grupo, com combinações iguais.

A ausência de transição conta como um grupo

		- -			0	1			0	1
$\rightarrow s_0 \parallel s$	$s_0 \mid s$	 s ₁		\rightarrow s_0	<i>s</i> ₀	<i>s</i> ₁		\rightarrow s_0	s ₀ (A)	s ₁ (A)
$s_1 \mid s_1$	$s_2 \mid s$	s_1	Α	s_1	<i>s</i> ₂	s_1	Α	s_1	s ₂ (B)	s_1 (A)
*S ₂ S	$s_0 \mid s$	s ₃		<i>s</i> ₃	s ₂	<i>s</i> ₃		<i>s</i> ₃	s ₂ (B)	s ₃ (A)
$s_3 \mid s_2$	$s_2 \mid s$	s ₃	В	* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃	В	* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃
	0 1	1			0	1			0	1
$\rightarrow s_0$ s	s_0 s	 s ₁	Α	\rightarrow s_0	<i>s</i> ₀	s_1	Α	\rightarrow s_0	<i>s</i> ₀	s_1
s_1 s_2	s_2 s	s_1	В	s_1	s ₂	s_1	В	s_1	s_2 (C)	s_1 (B)
$s_3 \mid s_2$	$s_2 \mid s$	s ₃		<i>s</i> ₃	<i>s</i> ₂	<i>s</i> ₃	Ь	<i>s</i> ₃	s ₂ (C)	s_3 (B)
*S2 S	$s_0 \mid s$		С	* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃	С	* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃

5. Se os grupos foram alterados, e ainda existem grupos com mais de um estado, voltar ao ponto **2**.

Se os grupos não foram alterados, ou só existem grupos com um estado, passar ao ponto ${\bf 6}$

	0	1			0	1				0	1
$\rightarrow s_0$	<i>s</i> ₀	<i>s</i> ₁		\rightarrow s_0	<i>s</i> ₀	<i>s</i> ₁			\rightarrow s_0	s ₀ (A)	s ₁ (A)
s_1	s ₂	s_1	Α	s_1	s ₂	s_1		Α	s_1	s ₂ (B)	s ₁ (A)
* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃		<i>s</i> ₃	<i>s</i> ₂	<i>s</i> ₃			<i>s</i> ₃	s ₂ (B)	s ₃ (A)
<i>s</i> ₃	s ₂	<i>s</i> ₃	В	* <i>s</i> ₂	<i>s</i> ₀	s 3		В	* <i>S</i> ₂	<i>s</i> ₀	<i>S</i> ₃
	0	1			0	1				0	1
$\rightarrow s_0$	<i>s</i> ₀	<i>s</i> ₁	Α	\rightarrow s_0	<i>s</i> ₀	<i>s</i> ₁	-	Α	$\rightarrow s_0$	<i>s</i> ₀	s_1
s_1	s ₂	s_1	В	s_1	s ₂	s_1		В	s_1	s ₂ (C)	s_1 (B)
		l _	Ь	<i>s</i> ₃	s ₂	<i>s</i> ₃		Ь	<i>s</i> ₃	s ₂ (C)	s ₃ (B)
s 3	s ₂	5 3		-5	52	-3			-5	-2	-3

6. Nos grupos com mais de um estado, manter um estado alterando todas as transições para os outros estados do grupo para esse estado

Neste caso elimina-se o estado s_3 e altera-se a transição do estado s_2 com o símbolo 1 para o estado equivalente s_1

	0	1	_			0	1				0	1
$\rightarrow s_0$	<i>s</i> ₀	<i>s</i> ₁	-		\rightarrow s_0	<i>s</i> ₀	s_1	-		\rightarrow s_0	s ₀ (A)	s ₁ (A)
s_1	<i>s</i> ₂	s_1		Α	s_1	<i>s</i> ₂	s_1		Α	s_1	s_2 (B)	s_1 (A)
* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃			<i>s</i> ₃	<i>s</i> ₂	<i>5</i> ₃	_		<i>s</i> ₃	s ₂ (B)	s ₃ (A)
<i>s</i> ₃	<i>s</i> ₂	<i>s</i> ₃		В	* <i>s</i> ₂	<i>s</i> ₀	<i>s</i> ₃		В	* <i>s</i> ₂	<i>s</i> ₀	<i>S</i> ₃
1		1 .			1	1				i	i a	i .
	0	1	_			0	1				0	1
$ o s_0$	0 s ₀	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Ξ	Α	$\rightarrow s_0$	0 s ₀	1 s ₁	= :	Α	$\rightarrow s_0$	5 ₀	$\frac{1}{s_1}$
$ o s_0 \ o s_1$	<u> </u>	$\begin{array}{ c c c }\hline s_1 \\ \hline s_1 \\ \hline \end{array}$	=		$ ightarrow s_0$ s_1		1 s ₁ s ₁	: :		$ ightarrow s_0$ s_1	s ₀	s ₁ (B)
	<i>s</i> ₀		-	A B	-	<i>s</i> ₀		= :	A B		s ₀	(D)

6. Nos grupos com mais de um estado, manter um estado alterando todas as transições para os outros estados do grupo para esse estado

Neste caso elimina-se o estado s_3 e altera-se a transição do estado s_2 com o símbolo 1 para o estado equivalente s_1

	а	b	С
$\rightarrow s_0$	<i>S</i> 5	s ₂	_
$*s_1$	s ₂	s_1	<i>S</i> ₅
s ₂	<i>s</i> ₁	s 6	s ₁
s 3	5 9	s 2	s ₁
<i>5</i> 4	s 5	<i>s</i> ₆	_
<i>S</i> 5	S 4	s 9	s 8
<i>s</i> ₆	5 9	5 3	5 9
* <i>s</i> 7	s 5	5 9	s 5
* <i>s</i> ₈	s 5	S 7	s 5
* <i>s</i> ₉	s ₃	s 9	<i>S</i> 5

	a	b	С
$\rightarrow s_0$	<i>S</i> 5	s ₂	_
*s ₁	s ₂	s_1	s 5
s ₂	<i>s</i> ₁	s 6	s_1
5 3	5 9	s 2	<i>s</i> ₁
<i>S</i> ₄	s 5	s 6	_
<i>s</i> ₅	S 4	s 9	<i>s</i> ₈
s 6	5 9	s 3	S 9
* <i>s</i> 7	s 5	5 9	s 5
* <i>s</i> ₈	s 5	S 7	s 5
* <i>s</i> ₉	s ₃	s 9	<i>s</i> ₅

	а	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_2 s_3	s_1	s ₂ s ₆	s_1
s ₃	S 9	s ₂	<i>s</i> ₁
54 55 56	<i>s</i> ₅	<i>s</i> ₆	—
<i>s</i> ₅	<i>S</i> ₄	s ₆ s ₉	5 8
s ₆	5 9	s 3	5 8 5 9

	a	b	С
$\rightarrow s_0$	s 5	s ₂	_
*s ₁	s ₂	s_1	s 5
s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
s 3	5 9	s 2	<i>s</i> ₁
S 4	s 5	s 6	_
s 5	S 4	s 9	<i>s</i> ₈
<i>s</i> ₆	5 9	s 3	S 9
*57	s 5	5 9	S 5
* <i>s</i> ₈ * <i>s</i> ₉	s 5	S 7	<i>S</i> 5
* <i>s</i> ₉	s ₃	s 9	<i>S</i> 5

	a	b	С
$\rightarrow s_0$	<i>S</i> ₅	s ₂	_
s ₂	s_1	<i>s</i> ₆	<i>s</i> ₁
s 3	S 9	s ₂	<i>s</i> ₁
<i>S</i> 4	s 5	<i>s</i> ₆	_
<i>s</i> ₅	<i>S</i> ₄	S 9	<i>s</i> ₈
<i>s</i> ₆	S 9	s 3	S 9
*s ₁	s ₂	s_1	<i>S</i> 5
* <i>s</i> 7	s 5	s 9	<i>S</i> 5
*57 *58 *59	s 5	<i>S</i> 7	<i>S</i> 5
*s ₉	s ₃	s 9	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s 5	s ₂	_
*s ₁	s ₂	s_1	s 5
s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
s 3	5 9	s 2	<i>s</i> ₁
S 4	s 5	s 6	_
s 5	S 4	s 9	<i>s</i> ₈
<i>s</i> ₆	5 9	s 3	S 9
*57	s 5	5 9	S 5
* <i>s</i> ₈ * <i>s</i> ₉	s 5	S 7	<i>S</i> 5
* <i>s</i> ₉	s ₃	s 9	<i>S</i> 5

		a	b	С
	$\rightarrow s_0$	<i>S</i> ₅	s ₂	_
	s ₂	s_1	s 6	<i>s</i> ₁
1	s 3	s 9	s ₂	<i>s</i> ₁
_	<i>S</i> 4	s ₅	<i>s</i> ₆	—
	s 5	<i>S</i> ₄	S 9	s 8
	s 6	S 9	s 3	5 9
	*s ₁	s ₂	s_1	s 5
	*57 *58 *59	s ₅	s 9	<i>S</i> 5
	* <i>s</i> ₈	s ₅	<i>S</i> 7	s 5
	* <i>s</i> ₉	s ₃	s 9	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	<i>S</i> 5	s ₂	_
$*s_1$	s ₂	s_1	s 5
s 2	<i>s</i> ₁	s 6	s_1
s 3	5 9	s 2	s_1
5 4	s 5	<i>s</i> ₆	_
<i>S</i> 5	S 4	s 9	s 8
s 6	5 9	5 3	5 9
* <i>s</i> 7	s 5	S 9	<i>S</i> 5
*s ₈ *s ₉	s 5	<i>S</i> 7	<i>S</i> 5
* <i>s</i> ₉	s ₃	s 9	s 5

		а	b	С
	$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
	s ₂	s_1	$S_6^{(1)}$	s_1
1	s 3	S 9	s ₂ (1)	<i>s</i> ₁
	<i>S</i> ₄	s ₅ (1)	s ₆ (1)	—
	<i>s</i> ₅	s ₄ ⁽¹⁾	S 9	<i>s</i> ₈
	<i>s</i> ₆	S 9	s ₃ (1)	S 9
	*s ₁	s ₂ ⁽¹⁾	s_1	s ₅ (1)
	*57	s ₅ (1)	s 9	s ₅ (1)
	* <i>s</i> ₈	s ₅ (1)	<i>S</i> 7	s ₅ (1)
	*s ₉	s ₃ ⁽¹⁾	s 9	s ₅ (1)

	a	b	С
$\rightarrow s_0$	s 5	s ₂	_
$*s_1$	s ₂	s_1	s 5
s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
s 3	5 9	s 2	<i>s</i> ₁
<i>S</i> 4	s 5	s 6	_
<i>s</i> ₅	<i>S</i> ₄	s 9	<i>s</i> ₈
s 6	5 9	s 3	S 9
* <i>s</i> 7	s 5	5 9	s 5
* <i>s</i> ₈ * <i>s</i> ₉	s 5	S 7	s 5
* <i>s</i> ₉	s ₃	s 9	<i>S</i> 5

		a	b	с
	$\rightarrow s_0$	s ₅ ⁽¹⁾	s ₂ ⁽¹⁾	_
	s ₂	s_1	s ₆ (1)	s_1
1	5 3	5 9	$s_{2}^{(1)}$	s_1
-	<i>S</i> ₄	s ₅ (1)	s ₆ (1)	_
	s 5	s ₄ ⁽¹⁾	S 9	s 8
	s 6	S 9	s ₃ (1)	S 9
	*s ₁	s ₂ (1)	s_1	s ₅ (1)
2	*57	s ₅ (1)	s 9	s ₅ (1)
-	* <i>s</i> ₈	s ₅ (1)	<i>S</i> 7	$s_5^{(1)}$
	*s ₉	s ₃ ⁽¹⁾	s 9	s ₅ (1)

	a	b	С
$\rightarrow s_0$	s 5	s ₂	_
$*s_1$	s ₂	s_1	s 5
s 2	<i>s</i> ₁	s 6	s_1
s 3	5 9	s 2	s_1
<i>S</i> 4	s 5	s 6	_
<i>s</i> ₅	<i>S</i> ₄	s 9	s 8
s 6	5 9	s 3	5 9
* <i>s</i> 7	s 5	5 9	<i>S</i> 5
* <i>s</i> ₈ * <i>s</i> ₉	s 5	S 7	s 5
* <i>s</i> ₉	s ₃	s 9	s 5

		1		ı
		a	b	С
	$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
	s ₂	$s_1^{(2)}$	s ₆ ⁽¹⁾	s ₁ ⁽²⁾
1	s 3	$s_9^{(2)}$	$s_2^{(1)}$	s ₁ ⁽²⁾
_	<i>S</i> 4	s ₅ (1)	s ₆ ⁽¹⁾	l —.
	s 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
	<i>s</i> ₆	s ₉ (2)	s ₃ ⁽¹⁾	s ₉ (2)
	*s ₁	s ₂ (1)	s ₁ ⁽²⁾	s ₅ (1)
2	*57	s ₅ (1)	s ₉ (2)	s ₅ (1)
-	* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	s ₅ (1)
	*s ₉	s ₃ (1)	s ₉ (2)	s ₅ (1)

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	$ s_1^{(2)} $	$s_6^{(1)}$	s ₁ ⁽²⁾
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> 4	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
s 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
s 6	s ₉ (2)	s ₃ (1)	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	s ₅ (1)
*s ₉	s ₃ ⁽¹⁾	$s_9^{(2)}$	s ₅ (1)

	а	b	С
ļ		l	

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	$s_1^{(2)}$	$s_6^{(1)}$	$s_1^{(2)}$
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> ₄	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —.
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
<i>s</i> ₆	s ₉ (2)	$s_3^{(1)}$	s ₉ (2)
*s ₁	s ₂ (1)	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ (2)	s ₅ (1)
*s ₉	s ₃ ⁽¹⁾	$s_9^{(2)}$	$s_5^{(1)}$

	a	b	С
$\rightarrow s_0$ s_4	<i>s</i> ₅	s ₂	_
<i>S</i> ₄	<i>S</i> ₅	s ₂ s ₆	_
l			

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	$s_1^{(2)}$	$s_6^{(1)}$	s ₁ ⁽²⁾
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> 4	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	s ₃ (1)	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> ₇	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ (2)	$s_5^{(1)}$
*s ₉	$s_3^{(1)}$	$s_9^{(2)}$	$s_5^{(1)}$

	а	b	С
$\rightarrow s_0$ s_4	<i>S</i> ₅	s ₂	_
<i>S</i> 4	<i>S</i> 5	s ₂ s ₆	_

	a	b	С
$\rightarrow s_0$	s ₅ (1)	$s_2^{(1)}$	_
<i>s</i> ₂	$s_1^{(2)}$	s ₆ (1)	s ₁ ⁽²⁾
s 3	s ₉ ⁽²⁾	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> ₄	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
s 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
s 6	s ₉ (2)	s ₃ ⁽¹⁾	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	s ₉ (2)	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	s ₅ (1)
* <i>s</i> ₉	$s_3^{(1)}$	s ₉ (2)	$s_5^{(1)}$

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>S</i> ₅	s ₂ s ₆	—
	s ₁	s 6	<i>s</i> ₁
\$2 \$3 \$6	59 59	56 52 53	s ₁ s ₉
<i>s</i> ₆	s 9	s ₃	s 9
I	1	I	I

	a	b	С
$\rightarrow s_0$	s ₅ (1)	$s_2^{(1)}$	_
<i>s</i> ₂	$s_1^{(2)}$	s ₆ (1)	s ₁ ⁽²⁾
s 3	s ₉ ⁽²⁾	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> ₄	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
s 6	s ₉ (2)	s ₃ ⁽¹⁾	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	s ₉ (2)	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	s ₅ (1)
* <i>s</i> ₉	$s_3^{(1)}$	s ₉ (2)	$s_5^{(1)}$

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>S</i> ₅	s ₂ s ₆	_
	<i>s</i> ₁		<i>s</i> ₁
5 ₂ 5 ₃ 5 ₆	S 9	56 52 53	s ₁ s ₉
<i>s</i> ₆	s 9	s ₃	s 9
ļ	1	l	ı

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	s ₁ ⁽²⁾	s ₆ ⁽¹⁾	$s_1^{(2)}$
s 3	s ₉ (2)	$s_2^{(1)}$	$s_1^{(2)}$
<i>S</i> ₄	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l - .
s 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	s ₃ ⁽¹⁾	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	s ₁ ⁽²⁾	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	s ₉ (2)	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	s ₅ (1)
* <i>s</i> ₉	$s_3^{(1)}$	s ₉ (2)	s ₅ (1)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	_
s ₂	s ₁	s 6	s_1
<i>s</i> ₃ 	5 9 5 9	s ₂ s ₃	s_1
<i>s</i> ₆	s 9	s 3	s ₉
<i>s</i> ₅	<i>S</i> 4	s 9	s 8
I	I		l

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	s ₁ ⁽²⁾	$s_6^{(1)}$	$s_1^{(2)}$
s 3	s ₉ (2)	$s_2^{(1)}$	$s_1^{(2)}$
<i>S</i> ₄	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —.
s 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	$s_3^{(1)}$	s ₉ (2)
*s ₁	s ₂ (1)	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ (2)	$s_5^{(1)}$
* <i>s</i> ₉	$s_3^{(1)}$	s ₉ (2)	s ₅ (1)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	_
	s_1	<i>s</i> ₆	s_1
s ₂ s ₃ s ₆	5 9 5 9	s ₂ s ₃	s_1
s ₆	s 9	s ₃	s ₁ s ₉
<i>s</i> ₅	<i>S</i> 4	s 9	s 8
l			

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	$ s_1^{(2)} $	s ₆ (1)	$s_1^{(2)}$
s 3	s ₉ ⁽²⁾	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>5</i> 4	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	_
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
<i>s</i> ₆	s ₉ (2)	s ₃ ⁽¹⁾	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	s ₁ ⁽²⁾	s ₅ (1)
*57	s ₅ (1)	s ₉ (2)	$s_5^{(1)}$
* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	$s_5^{(1)}$
*s ₉	$s_3^{(1)}$	s ₉ (2)	s ₅ ⁽¹⁾

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
<i>S</i> 4	s 5	s 6	_
s ₂	<i>s</i> ₁	s 6	<i>s</i> ₁
s 3	5 9	s ₂	s_1
<i>s</i> ₆	s 9	s ₃	s 9
<i>s</i> ₅	<i>S</i> 4	s 9	s 8
*s ₁	s ₂	s_1	s 5
* <i>s</i> ₇ * <i>s</i> ₈ * <i>s</i> ₉	s 5	s 9	s 5
* <i>s</i> ₈	s 5	<i>S</i> 7	s 5
* <i>s</i> ₉	<i>s</i> ₃	s 9	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	s ₁ ⁽²⁾	$s_6^{(1)}$	s ₁ ⁽²⁾
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> 4	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	s ₃ (1)	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ ⁽¹⁾	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ ⁽¹⁾	s ₇ (2)	s ₅ (1)
*s ₉	$s_3^{(1)}$	$s_9^{(2)}$	s ₅ (1)

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
•	<i>S</i> ₄	s 5	s 6	—
	s 2	s ₁	s 6	<i>s</i> ₁
2	s 3	S 9	s ₂	s_1
	s 6	s 9	s ₃	s 9
3	<i>S</i> 5	<i>S</i> ₄	s 9	s ₈
	*s ₁	s ₂	s_1	s 5
4	* <i>s</i> 7	<i>s</i> ₅	s 9	<i>S</i> 5
-	*s ₈ *s ₉	s ₅	<i>S</i> 7	<i>S</i> 5
	* <i>s</i> ₉	s ₃	s 9	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (1)	$s_2^{(1)}$	_
s ₂	s ₁ ⁽²⁾	s ₆ ⁽¹⁾	$s_1^{(2)}$
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> 4	s ₅ (1)	s ₆ ⁽¹⁾	l —
s 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	s ₃ ⁽¹⁾	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> 7	s ₅ (1)	s ₉ (2)	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ ⁽²⁾	s ₅ (1)
*s ₉	$s_3^{(1)}$	s ₉ (2)	$s_5^{(1)}$

		a	b	С
1	\rightarrow s ₀	<i>s</i> ₅	s ₂	_
-	$ ightarrow s_0$ s_4	s 5	s 6	_
	s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
2	s 3	5 9	s ₂	<i>s</i> ₁
	s 6	s 9	s ₃	s 9
3	<i>S</i> 5	s ₄ ⁽¹⁾	s 9	s 8
	*s ₁	s ₂	s_1	<i>S</i> ₅
4	* <i>s</i> 7	s 5	s 9	<i>s</i> ₅
-	*s ₈ *s ₉	s 5	s ₉ s ₇	<i>S</i> 5
	*s ₉	s ₃	s 9	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	$s_1^{(2)}$	$s_6^{(1)}$	s ₁ ⁽²⁾
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> 4	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	s ₃ (1)	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
* <i>s</i> ₇	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ (2)	$s_5^{(1)}$
*s ₉	$s_3^{(1)}$	$s_9^{(2)}$	$s_5^{(1)}$

		a	b	С
1	$\rightarrow s_0$	<i>S</i> ₅	s ₂ ⁽²⁾	_
-	<i>5</i> 4	<i>s</i> ₅	s ₆ (2)	l —
	s ₂	<i>s</i> ₁	s ₆ ⁽²⁾	<i>s</i> ₁
2	s 3	S 9	s ₂ ⁽²⁾ s ₃ ⁽²⁾	<i>s</i> ₁
	s 6	s 9	s ₃ ⁽²⁾	s 9
3	<i>S</i> 5	s ₄ ⁽¹⁾	s 9	s 8
	*s ₁	s ₂ ⁽²⁾	s_1	<i>S</i> ₅
4	*57	s ₅	s 9	<i>s</i> ₅
•	*s ₈ *s ₉	s 5	<i>S</i> 7	s 5
	* <i>s</i> ₉	s ₃ ⁽²⁾	s 9	<i>s</i> ₅

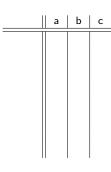
	a	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s 2	s ₁ ⁽²⁾	$s_6^{(1)}$	s ₁ ⁽²⁾
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>S</i> 4	s ₅ ⁽¹⁾	s ₆ ⁽¹⁾	l —
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ ⁽²⁾
<i>s</i> ₆	s ₉ (2)	s ₃ (1)	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	$s_1^{(2)}$	s ₅ (1)
*57	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ (2)	s ₅ (1)
*s ₉	$s_3^{(1)}$	$s_9^{(2)}$	s ₅ (1)

		a	Ь	l c
		(3)	(2)	
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
	<i>S</i> 4	s ₅ (3)	s ₆ (2)	_
	s 2	s ₁	s ₆ ⁽²⁾	<i>s</i> ₁
2	s 3	S 9	s ₂ ⁽²⁾	<i>s</i> ₁
	<i>s</i> ₆	s 9	s ₃ (2)	s 9
3	<i>S</i> 5	s ₄ ⁽¹⁾	s 9	s ₈
	*s ₁	s ₂ ⁽²⁾	s_1	s ₅ (3)
4	*57	s ₅ (3)	s 9	s ₅ (3)
•	* <i>s</i> ₈	s ₅ (3)	<i>S</i> 7	s ₅ (3)
	*s ₉	s ₃ (2)	s 9	s ₅ (3)

	а	b	С
$\rightarrow s_0$	s ₅ ⁽¹⁾	$s_2^{(1)}$	_
s ₂	s ₁ ⁽²⁾	$s_6^{(1)}$	$s_1^{(2)}$
s 3	s ₉ (2)	$s_2^{(1)}$	s ₁ ⁽²⁾
<i>5</i> 4	s ₅ ⁽¹⁾	$s_6^{(1)}$	l —
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ (2)	s ₈ (2)
s 6	s ₉ (2)	$s_3^{(1)}$	s ₉ (2)
*s ₁	s ₂ ⁽¹⁾	s ₁ ⁽²⁾	s ₅ (1)
* <i>s</i> ₇	s ₅ (1)	$s_9^{(2)}$	s ₅ (1)
* <i>s</i> ₈	s ₅ (1)	s ₇ (2)	s ₅ (1)
*s ₉	$s_3^{(1)}$	$s_9^{(2)}$	$s_5^{(1)}$

		ı		ı
		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
	s 2	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	s ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	s 5	s ₄ ⁽¹⁾	s ₉ (4)	s ₈ ⁽⁴⁾
	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
4	*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
- 1	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
	* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> 4	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
s ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ (4)
<i>S</i> ₅	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ ⁽³⁾



	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	l —
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
s ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ (4)
<i>S</i> ₅	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	_
ı			

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
s 2	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ (4)
<i>S</i> ₅	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ ⁽³⁾

ı	a	b	С
$ ightarrow s_0$ s_4	s ₅ s ₅	s ₂ s ₆	_
<i>5</i> 4	s 5	<i>s</i> ₆	_
	1		l

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
s 2	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ (4)	s ₃ ⁽²⁾	s ₉ (4)
<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
\rightarrow s_0 s_4	<i>s</i> ₅	s ₂ s ₆	—
	<i>s</i> ₁		<i>s</i> ₁
\$2 \$3 \$6	59 59	5 ₆ 5 ₂ 5 ₃	s ₁ s ₉
<i>s</i> ₆	s 9	s ₃	s 9

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
s 2	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s9 ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	$s_9^{(4)}$	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
*s ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ ⁽³⁾

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	—
	s ₁		<i>s</i> ₁
<i>s</i> ₂ <i>s</i> ₃ <i>s</i> ₆	59 59	56 52 53	s ₁ s ₉
s ₆	s 9	s ₃	s 9
1	1	l	ı

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
s 6	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ (4)
<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)

	a	b	С
\rightarrow s ₀	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>s</i> ₅	<i>s</i> ₂ <i>s</i> ₆	_
s ₂	s ₁	s 6	<i>s</i> ₁
<i>s</i> ₃		s ₂	s_1
<i>s</i> ₃	<i>S</i> 9 <i>S</i> 9	<i>s</i> ₂ <i>s</i> ₃	s 9
<i>S</i> ₅	<i>S</i> 4	s 9	s 8

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
s ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> ₅	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>s</i> ₅	<i>s</i> ₂ <i>s</i> ₆	_
s ₂	s ₁	s 6	<i>s</i> ₁
s 3		s ₂	s_1
<i>s</i> ₃ 	59 59	<i>s</i> ₂ <i>s</i> ₃	s ₉
<i>s</i> ₅	<i>S</i> 4	s 9	s 8

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> ₄	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₇	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
*s ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>S</i> ₅	<i>s</i> ₆	_
<i>s</i> ₂	s_1	s 6	s_1
s 3	S 9	s ₂	s_1
<i>s</i> ₆	s 9	s ₃	s 9
<i>s</i> ₅	<i>S</i> ₄	s 9	s 8
*s ₁ *s ₉	s ₂	s_1	s 5
* <i>s</i> ₉	s ₂ s ₃	s 9	s 5

	а	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
*s ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)

	a	b	С
\rightarrow s ₀	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>S</i> ₅	<i>s</i> ₆	_
<i>s</i> ₂	s_1	s 6	<i>s</i> ₁
s 3	59 59	s ₂	s_1
s ₆	s 9	s 3	s 9
<i>s</i> ₅	<i>S</i> ₄	s 9	s 8
*s ₁ *s ₉	s ₂	s ₁ s ₉	s 5
* <i>s</i> ₉	s ₂ s ₃	s 9	<i>S</i> 5

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ (4)
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
*s ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)

	а	b	С
$\rightarrow s_0$	<i>S</i> ₅	s ₂	_
<i>S</i> 4	s 5	<i>s</i> ₆	_
s ₂	s_1	s 6	s_1
<i>s</i> ₃	5 9	s ₂	<i>s</i> ₁
<i>s</i> ₆	s 9	s 3	s 9
<i>s</i> ₅	<i>S</i> ₄	s 9	s 8
*s ₁	s ₂	s_1	s 5
* <i>s</i> ₉	s ₃	s 9	s 5
* <i>s</i> ₇ * <i>s</i> ₈	<i>s</i> ₅	s ₉ s ₇	s ₅
* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	$s_3^{(2)}$	s ₉ ⁽⁴⁾
s 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	$s_9^{(4)}$	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ (3)

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
•	<i>S</i> 4	<i>s</i> ₅	s 6	_
	s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
2	s 3	S 9	s ₂	s_1
	s 6	s 9	s ₃	s 9
3	<i>S</i> 5	<i>S</i> ₄	s 9	s ₈
4	*s ₁	s ₂	s_1	<i>S</i> 5
_	* <i>s</i> ₉	s ₃	s 9	<i>S</i> 5
5	*s ₇ *s ₈	<i>s</i> ₅	s 9	<i>s</i> ₅
3	* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₇	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
*s ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ (3)

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
-	$ ightarrow s_0$ s_4	s 5	s 6	—
	s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
2	s 3	S 9	s ₂	s_1
	<i>s</i> ₆	s 9	s ₃	s 9
3	s 5	s ₄ (1)	s 9	s ₈
4	*s ₁	s ₂	s_1	s 5
7	* <i>s</i> ₉	s ₃	s 9	<i>S</i> ₅
5	*s ₇ *s ₈	<i>s</i> ₅	5 9	<i>s</i> ₅
J	* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ ⁽³⁾	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	$s_2^{(2)}$ $s_6^{(2)}$	_
-	5 4	<i>S</i> ₅	s ₆ ⁽²⁾	_
	s 2	s ₁	s ₆ ⁽²⁾	<i>s</i> ₁
2	s 3	S 9	$s_2^{(2)}$	s_1
	s 6	s 9	s ₃ (2)	s 9
3	<i>S</i> 5	s ₄ ⁽¹⁾	s 9	<i>s</i> ₈
4	*s ₁	$s_{2}^{(2)}$	s_1	<i>S</i> 5
	*s ₉	s ₃ (2)	s 9	<i>s</i> ₅
5	*s ₇ *s ₈	<i>s</i> ₅	s 9	<i>s</i> ₅
3	* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	s ₅ (3)

		а	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	
1	<i>S</i> ₄	s ₅ (3)	s ₆ (2)	_
	s ₂	s ₁	s ₆ (2)	<i>s</i> ₁
2	s 3	S 9	s ₂ ⁽²⁾	<i>s</i> ₁
	<i>s</i> ₆	s 9	s ₃ (2)	s 9
3	<i>s</i> ₅	s ₄ (1)	s 9	<i>s</i> ₈
4	*s ₁	s ₂ ⁽²⁾	s_1	s ₅ (3)
	*s ₉	s ₃ (2)	s 9	s ₅ (3)
5	* <i>s</i> ₇	s ₅ (3)	s 9	s ₅ (3)
J	* <i>s</i> ₈	s ₅ (3)	<i>s</i> ₇	s ₅ (3)

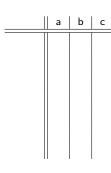
	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ (4)	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>s</i> ₅	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	$s_1^{(4)}$	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	$s_9^{(4)}$	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	$s_5^{(3)}$

		a	b	С
	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
1	<i>5</i> 4	s ₅ (3)	s ₆ (2)	<u> </u>
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s9 ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
	s ₆	s ₉ ⁽⁴⁾	s ₃ (2)	s ₉ ⁽⁴⁾
3	s 5	s ₄ (1)	s ₉ (4)	s ₈
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
	* <i>s</i> 9	s ₃ (2)	s ₉ (4)	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ (4)	s ₅ (3)
3	* <i>s</i> ₈	s ₅ (3)	<i>s</i> ₇	s ₅ (3)

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
s 6	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁴⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> 7	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁴⁾	s ₅ (3)
*s ₉	s ₃ ⁽²⁾	$s_9^{(4)}$	$s_5^{(3)}$

		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ (4)	$s_2^{(2)}$	s ₁ ⁽⁴⁾
	<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ (2)	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s4 ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ (5)
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
7	*s ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	* <i>s</i> ₇	s ₅ (3)	s ₉ (4)	s ₅ (3)
3	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
s 6	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> ₅	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ (4)	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)
- 1			



	а	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s ₃	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	$s_3^{(2)}$	s ₉ ⁽⁴⁾
<i>S</i> ₅	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	$s_1^{(4)}$	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	$s_9^{(4)}$	s ₅ (3)
*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ ⁽³⁾	s ₇ ⁽⁵⁾	$s_5^{(3)}$

	a	b	С
$ ightarrow s_0 \ s_4$	<i>s</i> ₅	s ₂	_
<i>S</i> ₄	<i>s</i> ₅	s ₂ s ₆	_
I			

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
<i>s</i> ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ (4)
5 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	_
ı			

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>S</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	s ₅	s ₂ s ₆	—
<i>s</i> ₂	s ₁		<i>s</i> ₁
s ₃ s ₆	59 59	56 52 53	s ₁ s ₉
<i>s</i> ₆	s 9	s ₃	s 9
l	I	l	I

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ (4)
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	—
	s ₁		<i>s</i> ₁
<i>s</i> ₂ <i>s</i> ₃ <i>s</i> ₆	59 59	56 52 53	s ₁ s ₉
s ₆	s 9	s ₃	s 9
ı	1	l	I

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ ⁽³⁾

	а	b	С
\rightarrow s ₀	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>s</i> ₅	s ₂ s ₆	_
s ₂	s ₁	s 6	<i>s</i> ₁
s 3		s ₂	s_1
<i>s</i> ₃ 	S 9 S 9	s ₂ s ₃	s 9
<i>s</i> ₅	<i>S</i> 4	s 9	s 8

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ (4)
5 3	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	$s_3^{(2)}$	s ₉ ⁽⁴⁾
<i>S</i> ₅	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	$s_1^{(4)}$	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	$s_9^{(4)}$	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

	а	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>s</i> ₅	<i>s</i> ₂ <i>s</i> ₆	_
s ₂	<i>s</i> ₁	s 6	<i>s</i> ₁
s 3	5 9	s ₂	s_1
<i>s</i> ₃ 	59 59	<i>s</i> ₂ <i>s</i> ₃	s ₉
<i>s</i> ₅	<i>S</i> 4	s 9	s 8

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

ı	a	l b	l c
	_		_
$\rightarrow s_0$	s 5	s ₂	_
$\rightarrow s_0$ s_4	<i>S</i> 5	<i>s</i> ₆	_
s ₂	s_1	s 6	s_1
<i>s</i> ₃ <i>s</i> ₆	S 9	s ₂	s_1
s ₆	s 9	s ₃	s 9
<i>s</i> ₅	<i>S</i> ₄	s 9	<i>s</i> ₈
*s ₁ *s ₉	s ₂	<i>s</i> ₁	<i>S</i> 5
* <i>s</i> ₉	s ₂ s ₃	s 9	<i>S</i> 5

	a b		С	
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_	
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_	
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾	
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾	
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)	
* <i>s</i> 9	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)	
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)	
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)	

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$\rightarrow s_0$ s_4	<i>s</i> ₅	s 6	_
s ₂	<i>s</i> ₁	s 6	<i>s</i> ₁
<i>s</i> ₃ <i>s</i> ₆	S 9	s ₂	<i>s</i> ₁
<i>s</i> ₆	s 9	s ₃	s 9
<i>s</i> ₅	<i>S</i> 4	s 9	s 8
*s ₁ *s ₉	s ₂	s_1	s 5
* <i>s</i> ₉	s ₂ s ₃	s 9	<i>S</i> 5

	a b		С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> ₅	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

ı	1 -	l L	
	a	b	С
$\rightarrow s_0$ s_4	<i>s</i> ₅	s ₂	_
S 4	<i>s</i> ₅	<i>s</i> ₆	_
s ₂	s_1	<i>s</i> ₆	s_1
<i>s</i> ₃	5 9	s ₂	s_1
<i>s</i> ₆	s 9	s ₃	s 9
<i>s</i> ₅	<i>S</i> ₄	s 9	s ₈
*s ₁ *s ₉ *s ₇	s ₂	s_1	<i>S</i> 5
* <i>s</i> ₉	s ₃	s 9	<i>S</i> 5
* <i>s</i> ₇	<i>s</i> ₅	s 9	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	—
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

	a	b	С
$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
$ ightarrow s_0$ s_4	<i>S</i> ₅	s 6	_
s ₂	<i>s</i> ₁	s 6	<i>s</i> ₁
s 3	S 9	s ₂	s_1
<i>s</i> ₆	s 9	s ₃	s 9
<i>s</i> ₅	<i>S</i> ₄	s 9	s 8
*s ₁	s ₂	s_1	s 5
*s ₁ *s ₉ *s ₇	s ₃	s 9	<i>S</i> 5
*s ₇	<i>s</i> ₅	s 9	s 5

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

ı	a	l b	С
	а	l D	C
$\rightarrow s_0$	<i>S</i> ₅	s ₂	_
S 4	s 5	<i>s</i> ₆	_
s ₂	s_1	s 6	s_1
<i>s</i> ₃	5 9	s ₂	<i>s</i> ₁
<i>s</i> ₆	s 9	s 3	s 9
<i>S</i> ₅	<i>S</i> 4	s 9	s 8
*s ₁	s ₂	s_1	s 5
*s ₀	s ₃	s 9	s 5
*s ₇	<i>s</i> ₅	s 9	<i>s</i> ₅
* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	s ₅

	a b		С	
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_	
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_	
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾	
s 3	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾	
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾	
*s ₁	s ₂ ⁽²⁾	$s_1^{(4)}$	s ₅ (3)	
* <i>s</i> ₉	s ₃ (2)	$s_9^{(4)}$	s ₅ (3)	
*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)	
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)	

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
•	<i>5</i> 4	s 5	s 6	—
	s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
2	s 3	5 9	s ₂	<i>s</i> ₁
	s 6	s 9	s ₃	s 9
3	<i>S</i> 5	<i>S</i> ₄	s 9	s ₈
4	*s ₁	s ₂	s_1	s 5
7	*s ₉	s ₃	s 9	<i>S</i> 5
5	*s ₇	<i>s</i> ₅	s 9	<i>s</i> ₅
6	* <i>s</i> ₈	<i>s</i> ₅	<i>S</i> ₇	s ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	s ₂	_
	<i>S</i> 4	<i>s</i> ₅	<i>s</i> ₆	_
	s 2	<i>s</i> ₁	s 6	<i>s</i> ₁
2	s 3	S 9	s ₂	<i>s</i> ₁
	s 6	s 9	s ₃	s 9
3	<i>S</i> 5	s ₄ ⁽¹⁾	s 9	s 8
4	*s ₁	s ₂	s_1	s 5
7	*s ₉	s ₃	s 9	<i>S</i> 5
5	*s ₇	<i>s</i> ₅	s 9	<i>s</i> ₅
6	* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

		a	b	С
1	$\rightarrow s_0$	<i>s</i> ₅	$s_2^{(2)}$ $s_6^{(2)}$	_
•	<i>S</i> 4	s 5	s ₆ ⁽²⁾	—
	s ₂	<i>s</i> ₁	s ₆ (2)	<i>s</i> ₁
2	s 3	5 9	$s_2^{(2)}$ $s_3^{(2)}$	<i>s</i> ₁
	s ₆	s 9	$s_3^{(2)}$	s 9
3	s 5	s ₄ ⁽¹⁾	s 9	s ₈
4	*s ₁	s ₂ ⁽²⁾	s_1	s 5
-	* <i>s</i> 9	s ₃ (2)	s 9	<i>S</i> 5
5	*s ₇	<i>s</i> ₅	s 9	<i>s</i> ₅
6	* <i>s</i> ₈	<i>s</i> ₅	<i>s</i> ₇	<i>s</i> ₅

	a	b	С
$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	$s_1^{(4)}$	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	$s_9^{(4)}$	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ ⁽³⁾

		a	Ь	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
1	<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
	s ₂	<i>s</i> ₁	s ₆ (2)	s_1
2	s 3	5 9	$s_2^{(2)}$	s_1
	s 6	s 9	s ₃ (2)	s 9
3	<i>S</i> 5	s ₄ (1)	s 9	s ₈
4	*s ₁	s ₂ ⁽²⁾	s_1	s ₅ (3)
_	*s ₉	s ₃ (2)	s 9	s ₅ (3)
5	* <i>s</i> ₇	s ₅ (3)	s 9	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	<i>s</i> ₇	s ₅ (3)

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
<i>S</i> 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

	1	l a	lь	l c
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
•	<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	—
	s 2	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	5 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	s ₆	s ₉ (4)	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s4 ⁽¹⁾	s ₉ (4)	s ₈
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
7	*s ₉	s ₃ (2)	s ₉ (4)	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ (4)	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	<i>s</i> ₇	s ₅ (3)

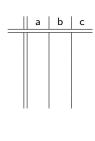
	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ (4)	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	$s_5^{(3)}$

		a	Ь	l c
		_ (3)	s ₂ ⁽²⁾	
1	$\rightarrow s_0$	s ₅ (3)	5 2(-)	_
_	<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
	s 6	$s_9^{(4)}$	s ₃ (2)	s ₉ ⁽⁴⁾
3	s 5	s ₄ (1)	s ₉ (4)	<i>s</i> ₈
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
7	*s ₉	s ₃ (2)	s ₉ (4)	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	₅₇ (5)	s ₅ (3)

	a	b	С
$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	_
s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
<i>s</i> ₆	s ₉ (4)	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁵⁾
*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₉	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
*57	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
* <i>s</i> ₈	$s_5^{(3)}$	s ₇ ⁽⁵⁾	s ₅ (3)

		ı		ı
		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>5</i> 4	s ₅ (3)	s ₆ (2)	_
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ ⁽⁴⁾	$s_2^{(2)}$	s ₁ ⁽⁴⁾
	s ₆	s ₉ ⁽⁴⁾	s ₃ (2)	s ₉ (4)
3	s 5	s ₄ ⁽¹⁾	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
	* <i>s</i> 9	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾	s ₅ (3)
5	* <i>s</i> ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

			а	b	С
	1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
	1	<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	
		s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	2	s 3	s9 ⁽⁴⁾	s ₂ (2)	s ₁ ⁽⁴⁾
		<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	3	<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
_	1	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
_	•	*s ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
- 5	5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
-6	5	*s ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)
			s ₅ ⁽³⁾	s ₉ ⁽⁴⁾ s ₇ ⁽⁵⁾	$s_5^{(3)}$ $s_5^{(3)}$



		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>S</i> ₄	s ₅ (3)	s ₆ (2)	
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>s</i> ₅	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
7	* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	$s_5^{(3)}$

	a	b	С
→1	3	2	_

		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
-	* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	*s ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

	a	b	С
$\rightarrow 1$ 2	3 4	2 2	_
2	4	2	4

		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	$s_2^{(2)}$	_
-	<i>S</i> ₄	s ₅ (3)	s ₆ ⁽²⁾	
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
-	* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

а	b	С
3	2	_
4	2	4
1	4	4 6
	3 4 1	

		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>S</i> ₄	s ₅ (3)	s ₆ (2)	
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s9 ⁽⁴⁾	s ₂ ⁽²⁾	$s_1^{(4)}$
	<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
-	* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

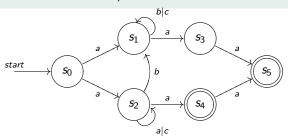
	а	b	С
\rightarrow 1	3	2	_
2 3 *4	3 4	2 2 4 4	4
3	1 2	4	4 6 3
*4	2	4	3

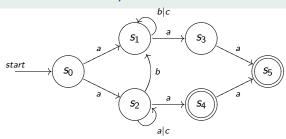
		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>5</i> 4	s ₅ (3)	s ₆ ⁽²⁾	
	s 2	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	<i>s</i> ₆	s ₉ ⁽⁴⁾	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
-	* <i>s</i> ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	*s ₇	s ₅ (3)	s ₉ ⁽⁴⁾	s ₅ (3)
6	*s ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

	а	b	С
\rightarrow 1	3	2	_
2	3 4	2 2 4 4 4	4
2 3 *4 *5	1	4	4 6 3 3
*4	1 2 3	4	3
*5	3	4	3

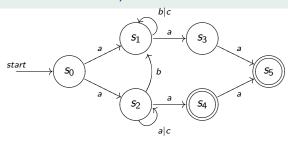
		a	b	С
1	$\rightarrow s_0$	s ₅ (3)	s ₂ ⁽²⁾	_
-	<i>S</i> ₄	s ₅ (3)	s ₆ (2)	_
	s ₂	s ₁ ⁽⁴⁾	s ₆ ⁽²⁾	s ₁ ⁽⁴⁾
2	s 3	s ₉ ⁽⁴⁾	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾
	<i>s</i> ₆	s ₉ (4)	s ₃ ⁽²⁾	s ₉ ⁽⁴⁾
3	<i>S</i> 5	s ₄ (1)	s ₉ ⁽⁴⁾	s ₈ ⁽⁶⁾
4	*s ₁	s ₂ ⁽²⁾	s ₁ ⁽⁴⁾	s ₅ (3)
7	*s ₉	s ₃ (2)	s ₉ ⁽⁴⁾	s ₅ (3)
5	* <i>s</i> ₇	s ₅ (3)	s ₉ (4)	s ₅ (3)
6	* <i>s</i> ₈	s ₅ (3)	s ₇ ⁽⁵⁾	s ₅ (3)

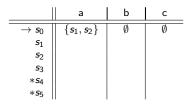
	а	b	С
\rightarrow 1	3	2	_
2	4	2 2 4	4
3	1	4	4 6 3 3
*4 *5 *6	1 2 3 3	4	3
*5	3	4 5	3
*6	3	5	3
,		'	

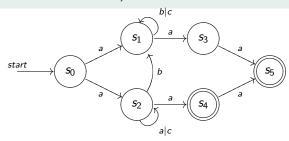


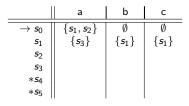


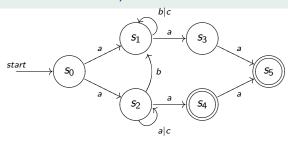
	a	b	С
$ ightarrow s_0 \ s_1 \ s_2 \ s_3 \ *s_4 \ *s_5 \ ightarrow s_5$			
s_1			
<i>s</i> ₂			
s 3			
* <i>S</i> 4			
* <i>\$</i> 5			

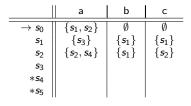


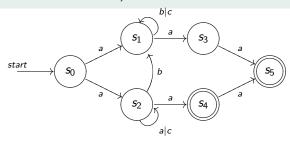




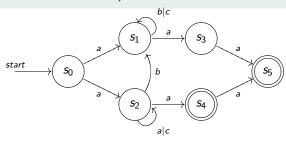




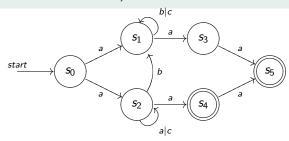




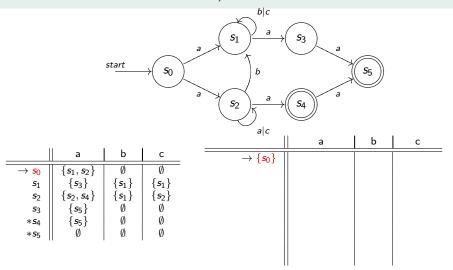
	a	b	С
$egin{array}{c} \longrightarrow s_0 & & & \\ s_1 & & & \\ s_2 & & & \\ s_3 & & & \\ *s_4 & & & \\ \hline \end{array}$	$ \begin{cases} \{s_1, s_2\} \\ \{s_3\} \\ \{s_2, s_4\} \\ \{s_5\} \end{cases} $	$ \begin{cases} \emptyset \\ \{s_1\} \\ \{s_1\} \\ \emptyset \end{cases} $	∅ {s ₁ } {s ₂ } ∅
* <i>S</i> 5			

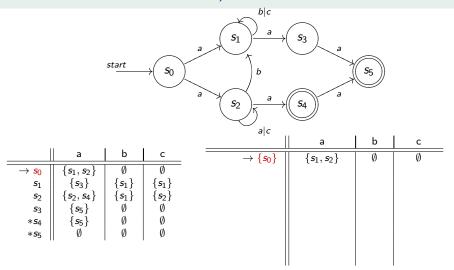


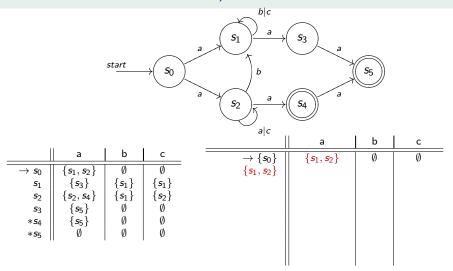
	a	b	С
$\rightarrow s_0$	$\{s_1, s_2\}$	Ø	Ø
s_1	{ <i>s</i> ₃ }	$\{s_1\}$	$\{s_1\}$
s ₂	$\{s_2, s_4\}$	$\{s_1\}$	$\{s_2\}$
s 3	{ s ₅ }	Ø	Ø
* <i>5</i> 4	$\{s_5\}$	Ø	Ø
* <i>S</i> 5			

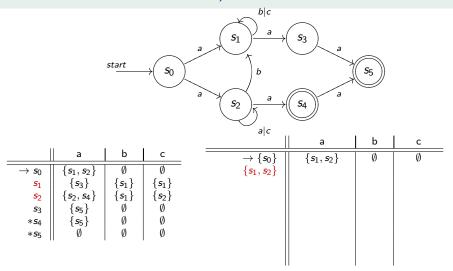


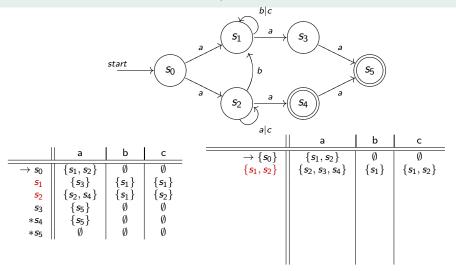
	a	b	С
$\rightarrow s_0$	$\{s_1, s_2\}$	Ø	Ø
s_1	{s ₃ }	$\{s_1\}$	$\{s_1\}$
s ₂	$\{s_2, s_4\}$	$\{s_1\}$	$\{s_2\}$
s 3	{ s ₅ }	Ø	Ø
* <i>S</i> 4	{ s ₅ }	Ø	Ø
* <i>S</i> 5	Ø	Ø	Ø

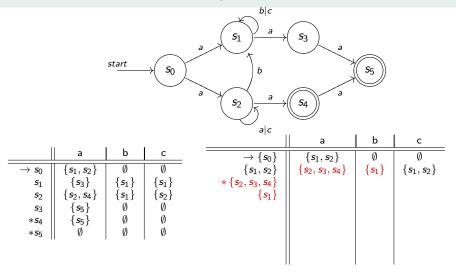


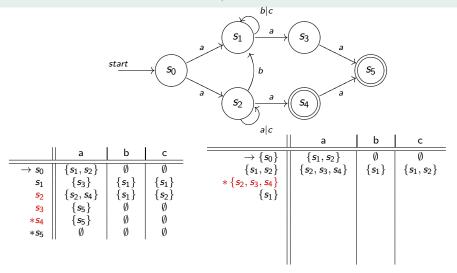


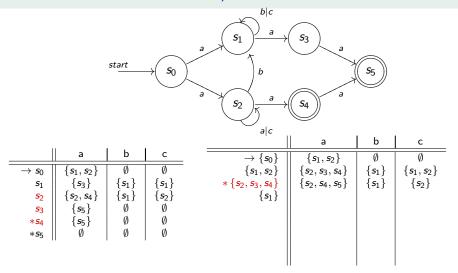


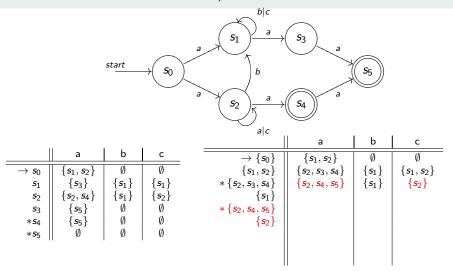


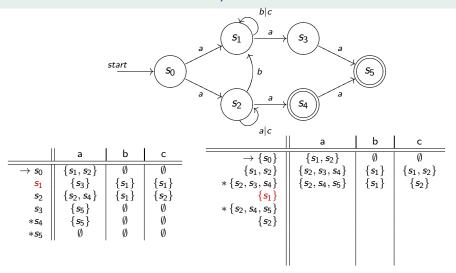


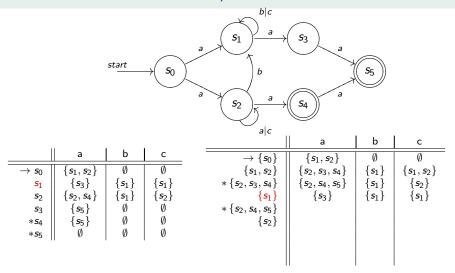


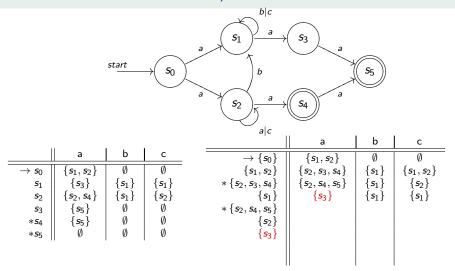


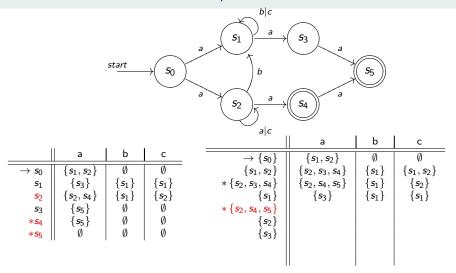


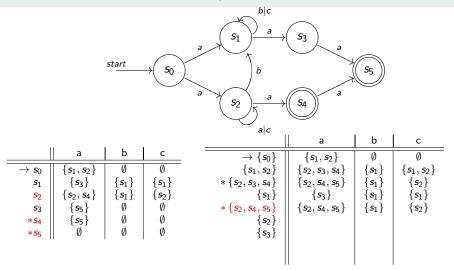


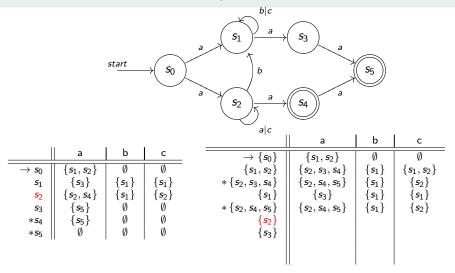


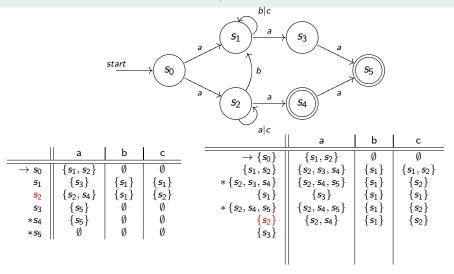


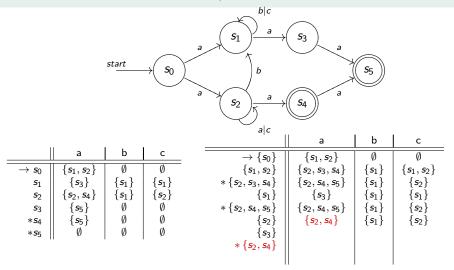


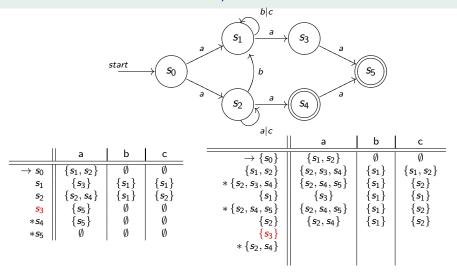


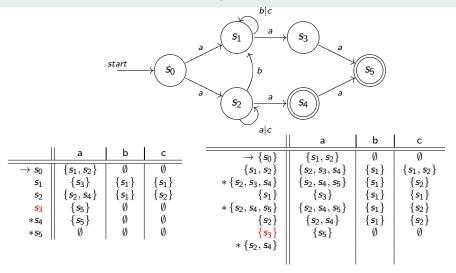


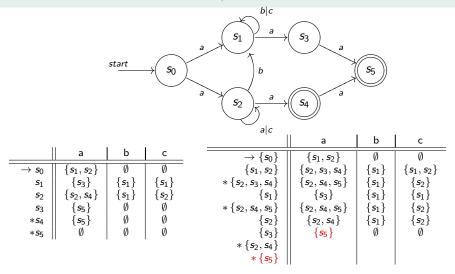


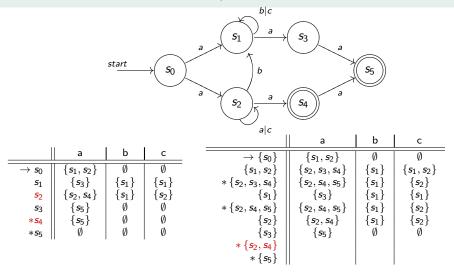


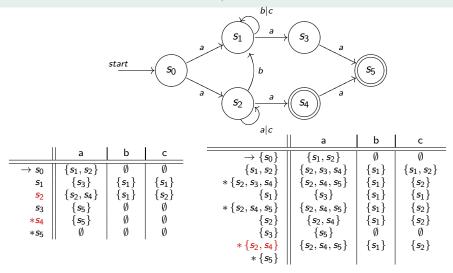


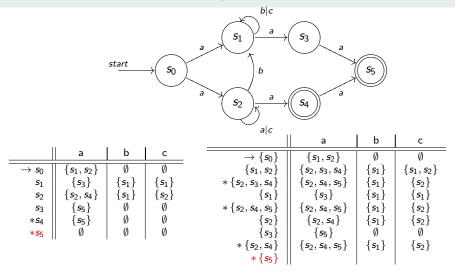


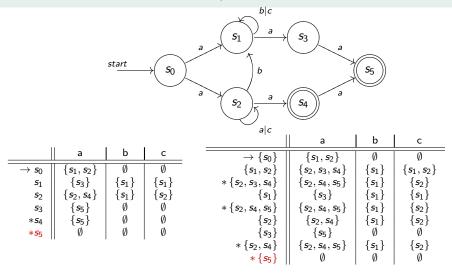












	a	b	С
$\rightarrow \{s_0\}$	$\{s_1, s_2\}$	Ø	Ø
$\{s_1, s_2\}$	$\{s_2, s_3, s_4\}$	$\{s_1\}$	$\{s_1, s_2\}$
$*\{s_2, s_3, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
$\{s_1\}$	{ <i>s</i> ₃ }	$\{s_1\}$	$\{s_1\}$
$*\{s_2, s_4, s_5\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
{s ₂ }	$\{s_2, s_4\}$	$\{s_1\}$	$\{s_2\}$
{ <i>s</i> ₃ }	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	$\{s_2\}$
$*\{s_5\}$	Ø	Ø	Ø

	а	b	С
$\rightarrow \{s_0\}$ A	$\{s_1, s_2\}$	Ø	Ø
$\{s_1, s_2\}$	$\{s_2, s_3, s_4\}$	$\{s_1\}$	$\{s_1, s_2\}$
$*\{s_2, s_3, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ <i>s</i> ₂ }
$\{s_1\}$	{ <i>s</i> ₃ }	$\{s_1\}$	$\{s_1\}$
$*\{s_2, s_4, s_5\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
{s ₂ }	$\{s_2, s_4\}$	$\{s_1\}$	{ s ₂ }
{ <i>s</i> ₃ }	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
$*\{s_5\}$	Ø	Ø	Ø

	a	b	С
\rightarrow A	$\{s_1, s_2\} B$	Ø	Ø
$\{s_1,s_2\}$ B	$\{s_2, s_3, s_4\}$	$\{s_1\}$	$\{s_1,s_2\}$ B
$*\{s_2, s_3, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
$\{s_1\}$	{ <i>s</i> ₃ }	$\{s_1\}$	$\{s_1\}$
$*\{s_2, s_4, s_5\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
{ <i>s</i> ₂ }	$\{s_2, s_4\}$	$\{s_1\}$	{ s ₂ }
{ <i>s</i> ₃ }	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	$\{s_2\}$
$*\{s_5\}$	Ø	Ø	Ø

	a	b	С
\rightarrow A	В	Ø	Ø
В	$\{s_2, s_3, s_4\}$ C	$\{s_1\}$	В
$*\{s_2, s_3, s_4\}$ C	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
$\{s_1\}$	{ <i>s</i> ₃ }	$\{s_1\}$	$\{s_1\}$
$*\{s_2, s_4, s_5\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
{ <i>s</i> ₂ }	$\{s_2, s_4\}$	$\{s_1\}$	{ s ₂ }
{ <i>s</i> ₃ }	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$	{ s ₂ }
*{s ₅ }	Ø	Ø	Ø

	a	b	С
\rightarrow A	В	Ø	Ø
В	C	$\{s_1\}$ D	В
*C	$\{s_2, s_4, s_5\}$	$\{s_1\}$ D	{ <i>s</i> ₂ }
$\{s_1\}$ D	{ <i>s</i> ₃ }	$\{s_1\}$ D	$\{s_1\}$ D
$*\{s_2, s_4, s_5\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$ D	{ s ₂ }
{ <i>s</i> ₂ }	$\{s_2, s_4\}$	$\{s_1\}$ D	{ <i>s</i> ₂ }
{ <i>s</i> ₃ }	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	$\{s_2, s_4, s_5\}$	$\{s_1\}$ D	{s ₂ }
*{ <i>s</i> ₅ }	Ø	Ø	Ø

	a	b	С
\rightarrow A	В	Ø	Ø
В	С	D	В
*C	$\{s_2, s_4, s_5\}$ E	D	$\{s_2\}$
D	{ <i>s</i> ₃ }	D	D
$*\{s_2, s_4, s_5\} E$	$\{s_2, s_4, s_5\}$ E	D	$\{s_2\}$
$\{s_2\}$	$\{s_2, s_4\}$	D	$\{s_2\}$
{s ₃ }	$\{s_5\}$	Ø	Ø
$*\{s_2, s_4\}$	$\{s_2, s_4, s_5\}$ E	D	$\{s_2\}$
*{ <i>s</i> ₅ }	Ø	Ø	Ø

	a	b	С
\rightarrow A	В	Ø	Ø
В	С	D	В
*C	E	D	$\{s_2\}F$
D	{ s ₃ }	D	D
*E	E	D	$\{s_2\}F$
$\{s_2\}F$	$\{s_2, s_4\}$	D	$\{s_2\}F$
{ <i>s</i> ₃ }	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	E	D	$\{s_2\}F$
*{ <i>s</i> ₅ }	Ø	Ø	Ø

	а	b	С
\rightarrow A	В	Ø	Ø
В	С	D	В
*C	E	D	F
D	{ <i>s</i> ₃ } G	D	D
*E	E	D	F
F	$\{s_2, s_4\}$	D	F
{ <i>s</i> ₃ } G	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}$	E	D	F
$*\{s_5\}$	Ø	Ø	Ø

	a	b	С
\rightarrow A	В	Ø	Ø
В	С	D	В
*C	E	D	F
D	G	D	D
*E	E	D	F
F	$\{s_2, s_4\}H$	D	F
G	{ s ₅ }	Ø	Ø
$*\{s_2, s_4\}H$	E	D	F
*{ <i>s</i> ₅ }	Ø	Ø	Ø

	а	b	С
\rightarrow A	В	Ø	Ø
В	C	D	В
*C	E	D	F
D	G	D	D
*E	E	D	F
F	Н	D	F
G	{ <i>s</i> ₅ }Ⅰ E	Ø	Ø
*H	E	D	F
$*\{s_5\}$ I	Ø	Ø	Ø

	a	b	С
\rightarrow A	В	Ø—	Ø—
В	С	D	В
*C	E	D	F
D	G	D	D
*E	E	D	F
F	Н	D	F
G	- 1	Ø—	Ø
*H	Е	D	F
*	Ø—	Ø—	Ø

	а	b	С
\rightarrow A	В		_
В	C	D	В
*C	Ε	D	F
D	G	D	D
*E	E	D	F
F	Н	D	F
G	- 1	_	_
*H	E	D	F
*	_	_	_

	а	b	С
\rightarrow A	В	_	_
В	C	D	В
*C	Ε	D	F
D	G	D	D
*E	Е	D	F
F	Н	D	F
G	- 1	—	_
*H	Е	D	F
*	—	—	—

	a	b	С
\rightarrow A	В	_	_
В	C G	D	В
D	G	D	D
F	Н	D	F
G	1	l —	_
*C	E	D	F
*C *E *H	E	D	F
*H	E	D	F
*	—	—	_

	а	b	С
\rightarrow A	В	_	_
В	C	D	В
*C	Ε	D	F
D	G	D	D
*E	E	D	F
F	Н	D	F
G	- 1	_	_
*H	E	D	F
*	_	—	_

		a	b	С
	\rightarrow A	В	_	_
	В	C G	D	В
1	D	G	D	D
	F	Н	D	F
	G	1	l —	_
	*C *E	E	D	F
	*E	E	D	F
	*H	E	D	F
	*	—	—	_

	а	b	С
\rightarrow A	В	_	_
В	C	D	В
*C	E	D	F
D	G	D	D
*E	Е	D	F
F	Н	D	F
G	- 1	 —	_
*H	E	D	F
*	—	—	_

		a	b	С
	\rightarrow A	B ⁽¹⁾	_	_
	В	С	D ⁽¹⁾	B ⁽¹⁾
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾
	F	Н	D ⁽¹⁾	F ⁽¹⁾
	G	1	—	—
	*C	E	D ⁽¹⁾	F ⁽¹⁾
	*E	E	$D^{(1)}$	F ⁽¹⁾
	*H	E	D ⁽¹⁾	F ⁽¹⁾
	*	_	<u> </u>	_

	а	b	С
\rightarrow A	В	_	_
В	C	D	В
*C	E	D	F
D	G	D	D
*E	Е	D	F
F	Н	D	F
G	- 1	 —	_
*H	E	D	F
*	—	—	_

		a	b	С
	\rightarrow A	B ⁽¹⁾	_	_
	В	С	D ⁽¹⁾	B ⁽¹⁾
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾
	F	Н	D ⁽¹⁾	F ⁽¹⁾
	G	1	—	l —
	*C	E	D ⁽¹⁾	F ⁽¹⁾
2	*E	E	D ⁽¹⁾	F ⁽¹⁾
	*H	E	D ⁽¹⁾	F ⁽¹⁾
	*	l —	l —	l —

	а	b	С
\rightarrow A	В	_	_
В	C	D	В
*C	E	D	F
D	G	D	D
*E	Е	D	F
F	Н	D	F
G	- 1	—	_
*H	E	D	F
*	—	—	_

		a	b	С
	\rightarrow A	B ⁽¹⁾	_	_
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾
1	D	G ⁽¹⁾	D ⁽¹⁾	$D^{(1)}$
	F	H ⁽²⁾	D ⁽¹⁾	$F^{(1)}$
	G	J(2)	l —	_
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾
2	*E	E ⁽²⁾	D ⁽¹⁾	$F^{(1)}$
2	*H	E ⁽²⁾	D ⁽¹⁾	$F^{(1)}$
	*	l —	_	_

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_					
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾					
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾					
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	G	I ⁽²⁾	l —	—					
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	*	—	_	—		١			

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_					
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾					
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾					
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	G	I ⁽²⁾	l —	l —					
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	*	—	—	—		ı			

		а	b	С						а		b		С
	\rightarrow A	B ⁽¹⁾	_	_			\rightarrow	·A		В	-	_	-	
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾										
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾										
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾										
	G	I ⁽²⁾	l —	<u> </u>										
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾										
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾										
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾										
	*	—	l —	l —					Ш				l	

		а	b	С					а		b		С
	\rightarrow A	B ⁽¹⁾	_	_			\rightarrow	4	В	-		-	_
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾									
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾									
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾									
	G	I ⁽²⁾	l —	_									
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾									
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾									
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾									
	*	—	l —	_				- 1		l			

		a	b	С					а	b		С
-	\rightarrow A	B ⁽¹⁾	_	_	_		\rightarrow A	Е	3			
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾			В		С	D	T	В
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾			F		Н	D		F
	F	H ⁽²⁾	$D^{(1)}$	F ⁽¹⁾								
	G	I ⁽²⁾	_	_								
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾								
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾								
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾								
	*	—	l —	l —								

		a	b	С			а	b	С
-	\rightarrow A	B ⁽¹⁾	_	_		\rightarrow A	В	_	
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾		В	С	D	В
1	D	G ⁽¹⁾	$D^{(1)}$	$D^{(1)}$		F	Н	D	F
	F	H ⁽²⁾	$D^{(1)}$	F ⁽¹⁾					
	G	I ⁽²⁾	_	_					
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	*	—	l —	l —					

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_		\rightarrow A	В	_	_
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾		В	С	D	В
1	D	G ⁽¹⁾	D ⁽¹⁾	$D^{(1)}$		F	Н	D	F
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		D	G	D	D
	G	I ⁽²⁾	_	—					
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	*	—	_	_					

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_		\rightarrow A	В	_	_
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾		В	С	D	В
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾		F	Н	D	F
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		D	G	D	D
	G	I ⁽²⁾	_	_					
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
_	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	*	—	—	—					

		а	b	С		а	b	С
	\rightarrow A	B ⁽¹⁾	_	_	\rightarrow A	В	_	
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾	В	С	D	В
1	D	G ⁽¹⁾	$D^{(1)}$	$D^{(1)}$	F	Н	D	F
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	D	G	D	D
	G	I ⁽²⁾	_	_	G	I	_	_
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾				
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾				
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾				
	*	—	—	_				

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_		\rightarrow A	В	_	
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾		В	С	D	В
1	D	G ⁽¹⁾	$D^{(1)}$	$D^{(1)}$		F	Н	D	F
	F	H ⁽²⁾	$D^{(1)}$	F ⁽¹⁾		D	G	D	D
	G	I ⁽²⁾	—	_		G	I	_	
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	∗E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾					
	*	_	_	_					

		a	b	С			a	b	С
	\rightarrow A	B ⁽¹⁾	_	_		\rightarrow A	В	_	
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾		В	С	D	В
1	D	G ⁽¹⁾	$D^{(1)}$	D ⁽¹⁾		F	Н	D	F
	F	H ⁽²⁾	$D^{(1)}$	F ⁽¹⁾		D	G	D	D
	G	I ⁽²⁾	_			G	ı	_	
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*C	E	D	F
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*E	E	D	F
_	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*H	E	D	F
	*	—	l —	—					

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_		\rightarrow A	В	_	
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾		В	С	D	В
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾		F	Н	D	F
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		D	G	D	D
	G	I ⁽²⁾	—			G	ı		
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*C	Е	D	F
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*E	E	D	F
2	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*H	E	D	F
	*	—	—	l —					

		a	b	С		а	b	С
	\rightarrow A	B ⁽¹⁾	_		\rightarrow A	В	_	
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾	В	С	D	В
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾	F	Н	D	F
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	D	G	D	D
	G	I ⁽²⁾	—		G	ı	_	
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	*C	Е	D	F
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	*E	E	D	F
_	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	*H	E	D	F
	*	—	—	l —	*	_	_	_

		a	b	С				a	b	С
	\rightarrow A	B ⁽¹⁾	_	_		1	\rightarrow A	В	I —	
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾			В	С	D	В
1	D	G ⁽¹⁾	$D^{(1)}$	D ⁽¹⁾		2	F	Н	D	F
	F	H ⁽²⁾	$D^{(1)}$	F ⁽¹⁾		3	D	G	D	D
	G	I ⁽²⁾	_			4	G	I	_	
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾			*C	Е	D	F
2	*E	E ⁽²⁾	$D^{(1)}$	F ⁽¹⁾		5	*E	E	D	F
-	*H	E ⁽²⁾	$D^{(1)}$	F ⁽¹⁾			*H	E	D	F
	*	—	—	—	•	6	*	_	_	_

		a	b	С			a	b	С
	\rightarrow A	B ⁽¹⁾	_	_	1	\rightarrow A	В	_	
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾		В	C ⁽⁵⁾	D(3)	B ⁽²⁾
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾	2	F	H ⁽⁵⁾	$D_{(3)}$	F ⁽²⁾
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	3	D	G	D	D
	G	I ⁽²⁾	_		4	G	I	_	_
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*C	Е	D	F
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	5	*E	E	D	F
-	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*H	E	D	F
	*	—	—	_	6	*	_	_	_

		a	b	С	_			a	b	С
	\rightarrow A	B ⁽¹⁾	_	_	-	1	\rightarrow A	В	_	_
	В	C ⁽²⁾	D ⁽¹⁾	B ⁽¹⁾			В	C ⁽⁵⁾	$D^{(3)}$	B ⁽²⁾
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾		2	F	H ⁽⁵⁾	$D_{(3)}$	F ⁽²⁾
	F	H ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		3	D	G	D	D
	G	I ⁽²⁾	_	_	-	4	G	ı	_	
	*C	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	-		*C	E ⁽⁵⁾	D(3)	F ⁽²⁾
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		5	*E	E ⁽⁵⁾	$D_{(3)}$	F ⁽²⁾
_	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾			*H	E ⁽⁵⁾	$D_{(3)}$	F ⁽²⁾
	*	—	—	—	-	6	*	_	_	

		a	b	С			а	b	С
	\rightarrow A	B ⁽¹⁾	_	_	1	\rightarrow A	B ⁽²⁾	_	_
	В	C ⁽²⁾	$D^{(1)}$	B ⁽¹⁾		В	C ⁽⁵⁾	D(3)	B ⁽²⁾
1	D	G ⁽¹⁾	D ⁽¹⁾	D ⁽¹⁾	2	F	H ⁽⁵⁾	$D_{(3)}$	F ⁽²⁾
	F	H ⁽²⁾	$D^{(1)}$	F ⁽¹⁾	3	D	G ⁽⁴⁾	D(3)	D(3)
	G	I ⁽²⁾	_		4	G	J(6)	_	
	*C	E ⁽²⁾	$D^{(1)}$	F ⁽¹⁾		*C	E ⁽⁵⁾	D(3)	F ⁽²⁾
2	*E	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾	5	*E	E ⁽⁵⁾	$D_{(3)}$	F ⁽²⁾
	*H	E ⁽²⁾	D ⁽¹⁾	F ⁽¹⁾		*H	E ⁽⁵⁾	D(3)	F ⁽²⁾
	*	—	-	—	6	*	_	_	_

		a	b	С
1	\rightarrow A	B ⁽²⁾	_	_
	В	C ⁽⁵⁾	D(3)	B ⁽²⁾
2	F	H ⁽⁵⁾	D(3)	F ⁽²⁾
3	D	G ⁽⁴⁾	D(3)	D(3)
4	G	I ⁽⁶⁾	_	_
	*C	E ⁽⁵⁾	D(3)	F ⁽²⁾
5	*E	E ⁽⁵⁾	D(3)	F ⁽²⁾
	*H	E ⁽⁵⁾	D(3)	F ⁽²⁾
6	*	_	_	_

		a	b	С
1	\rightarrow A	B ⁽²⁾	_	_
	В	C ⁽⁵⁾	D(3)	B ⁽²⁾
2	F	H ⁽⁵⁾	D(3)	F ⁽²⁾
3	D	G ⁽⁴⁾	D(3)	D(3)
4	G	I ⁽⁶⁾	_	_
	*C	E ⁽⁵⁾	D(3)	F ⁽²⁾
5	*E	E ⁽⁵⁾	D(3)	F ⁽²⁾
	*H	E ⁽⁵⁾	D(3)	F ⁽²⁾
6	*	_	_	_

	a	b	С
\rightarrow 1	2	_	_
2	5	3	2
3	4	3	3
4	6	_	_
4 *5 *6	5	3	2
*6	—	—	—

		а	b	С
1	\rightarrow A	B ⁽²⁾	_	_
	В	C ⁽⁵⁾	D(3)	B ⁽²⁾
2	F	H ⁽⁵⁾	D(3)	F ⁽²⁾
3	D	G ⁽⁴⁾	D(3)	D(3)
4	G	I(6)	_	_
	*C	E ⁽⁵⁾	D(3)	F ⁽²⁾
5	*E	E ⁽⁵⁾	D(3)	F ⁽²⁾
	*H	E ⁽⁵⁾	D(3)	F ⁽²⁾
6	*	_	_	_

	a	b	С
\rightarrow 1	2	_	_
2	5	3	2
3	4	3	2
4	6	_	_
4 *5 *6	5	3	2
*6	—	_	_

