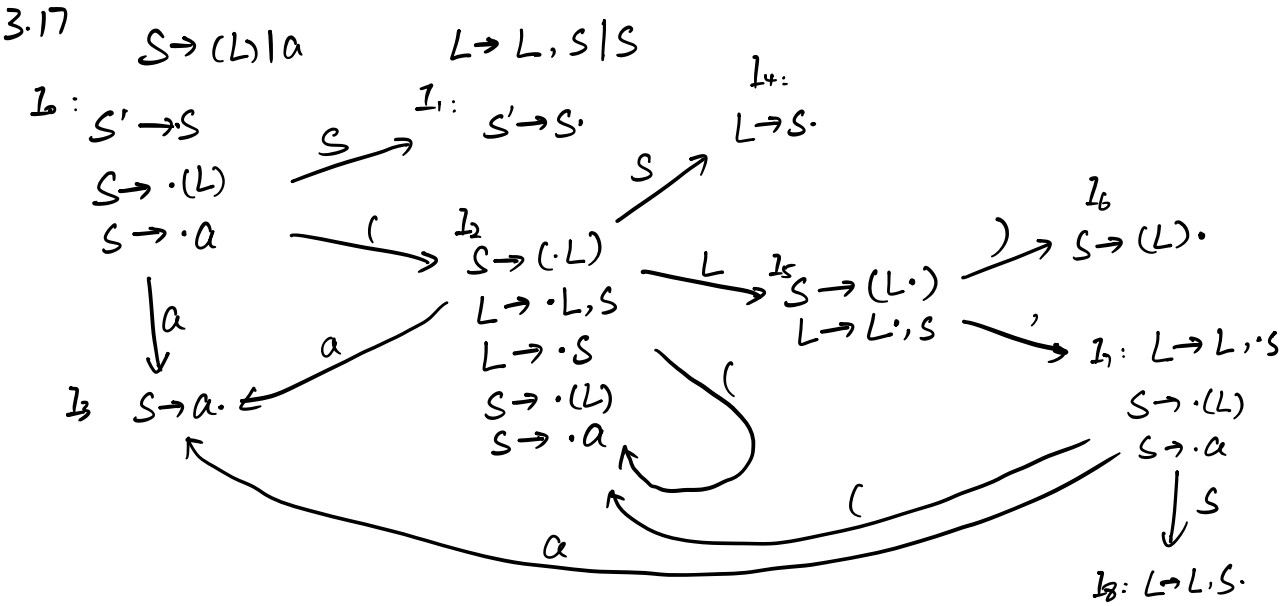
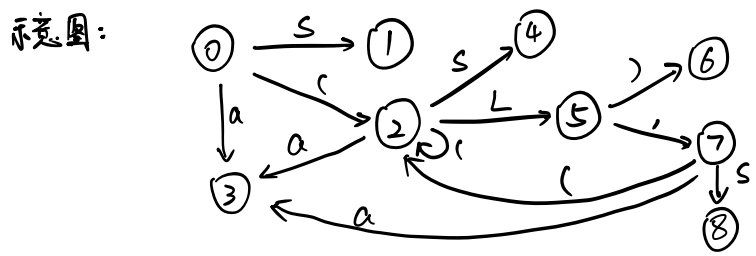
3.17

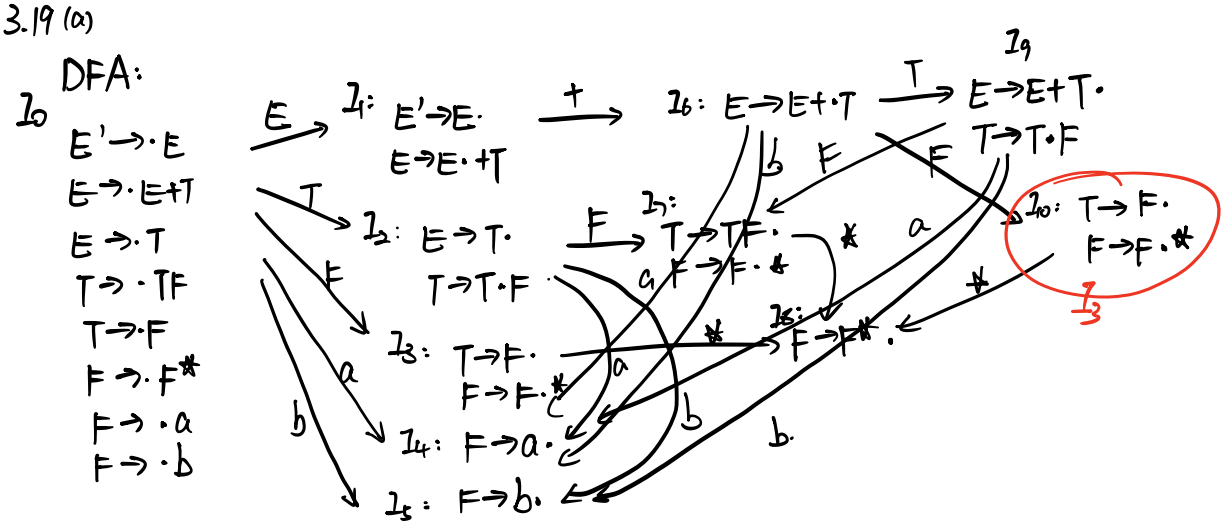


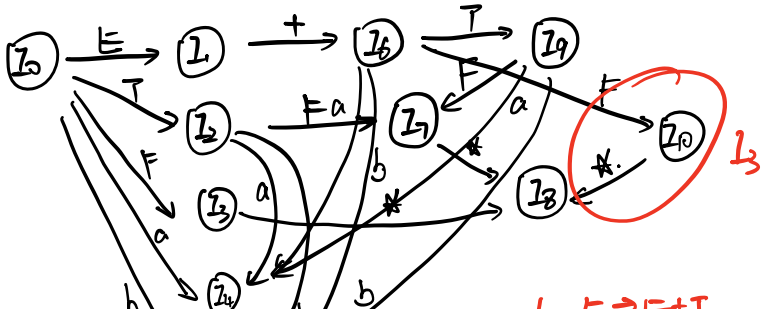
状态图：



3.19 (a)

DFA：





T: {+, a, b,), #} E: {+, #}

F: {+, a, b, *, #}

3. T→TF　4. T→F　5. F→F*　6: F→a
7: F→b

	a	b	+	*	$	E	T	F
0	s4	s5				1	2	3
1			s6		acc			
2	s4	s5	r2		r2			7
3	r4	r4	r4	s8	r4			
4	r6	r6	r6	r6	r6			
5	r7	r7	r7	r7	r7			
6	s4	s5					9	3
7	r3	r3	r3	s8	r3			
8	r5	r5	r5	r5	r5			
9	s4	s5	r1		r1			7

3.21 (a)

$S \to AaAb \mid BbBa \quad A \to \varepsilon \quad B \to \varepsilon$

对于 $S \to AaAb \mid BbBa$，$FIRST(AaAb) = \{a\}$，$FIRST(BbBa) = \{b\}$.

$FIRST(AaAb) \cap FIRST(BbBa) = \phi$. ∴为 LL(1) 文法

当输入 ε 时，$FOLLOW(A) = \{a, b\}$，$FOLLOW(B) = \{a, B\}$.

$FOLLOW(A) \cap FOLLOW(B) \neq \phi$. 无法预知 ε 归约成 A 还是 B.

∴不为 SLR(1) 文法