

Solutions

Seg 2101/2101A midterm

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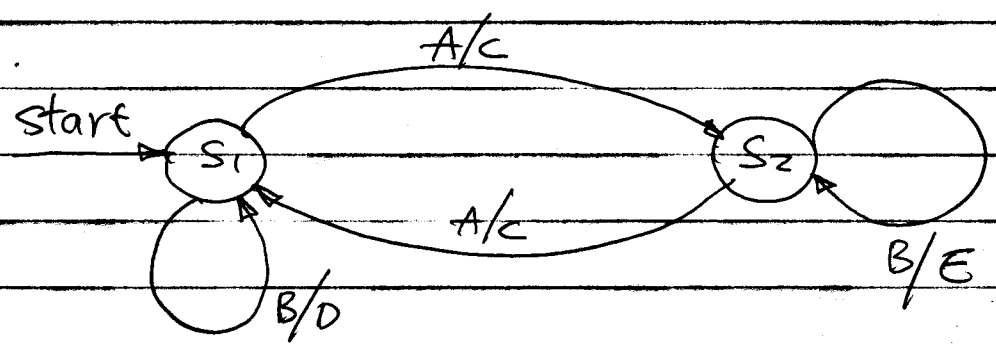
03/06/2003

• multiple choice

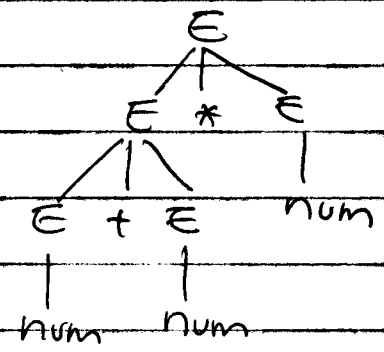
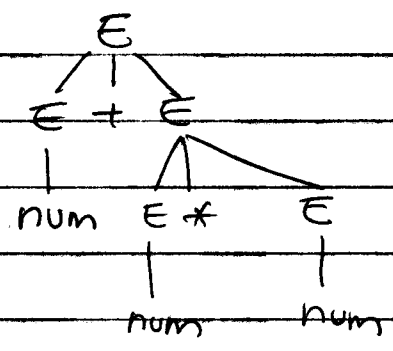
- 1. b 2. d 3. b 4. c 5. b
- 6. d 7. c 8. c 9. bad question,
- 10. c

• short answer

11.



12. num + num * num



B.

① ϵ -closure(1) = {1} A

② ϵ -closure(move(A, a))
= ϵ -closure({2}) = {2, 3, 5} B

③ ϵ -closure(move(A, b))
= ϵ -closure({}) = {} -

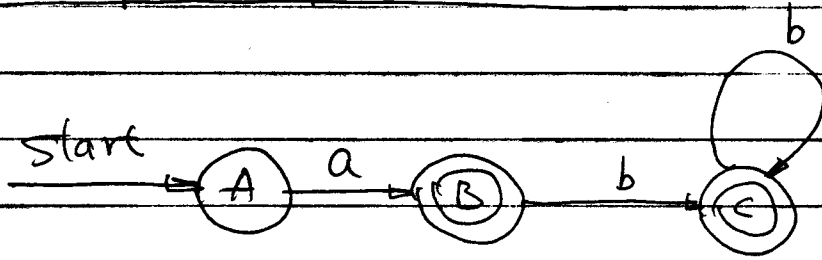
④ ϵ -closure(move(B, a))
= ϵ -closure({}) = {} -

⑤ ϵ -closure(move(B, b))
= ϵ -closure(move({2, 3, 5}, b))
= ϵ -closure({4}) = {3, 4, 5} C

⑥ ϵ -closure(move(C, a))
= ϵ -closure(move({3, 4, 5}, a))
= ϵ -closure({}) = {} -

⑦ ϵ -closure(move(C, b))
= ϵ -closure(move({3, 4, 5}, b))
= ϵ -closure({4}) = {3, 4, 5} C

	a	b
A	B	-
B	-	C
C	-	C



14.

$$[a-zA-Z][a-zA-Z0-9]^*xyz[a-zA-Z0-9]^*$$
$$|xyz[a-zA-Z0-9]^*$$

- Problem Solving

15. See the other doc file.