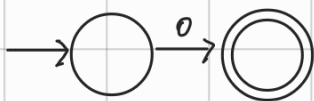
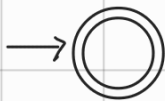


A.  $\Sigma = \{0, 1\}$  일 때 다음 언어를 인식하는 NFA의 State diagram을 그리시오.

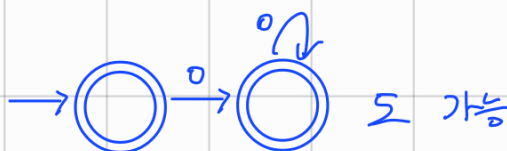
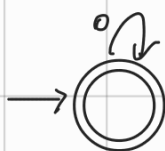
1.7(d)  $\{0\}$  with two states



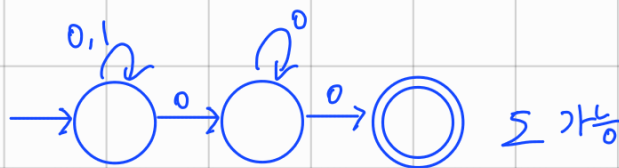
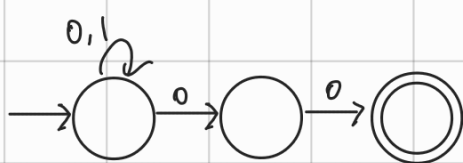
1.7(g)  $\{\varepsilon\}$  with one state



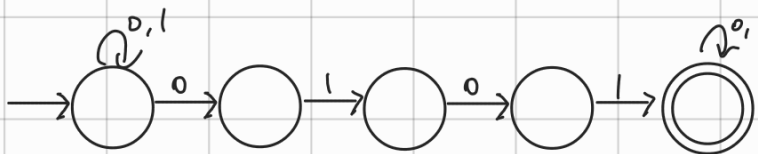
1.7(h)  $0^*$  with one state — 0이 여러 이상



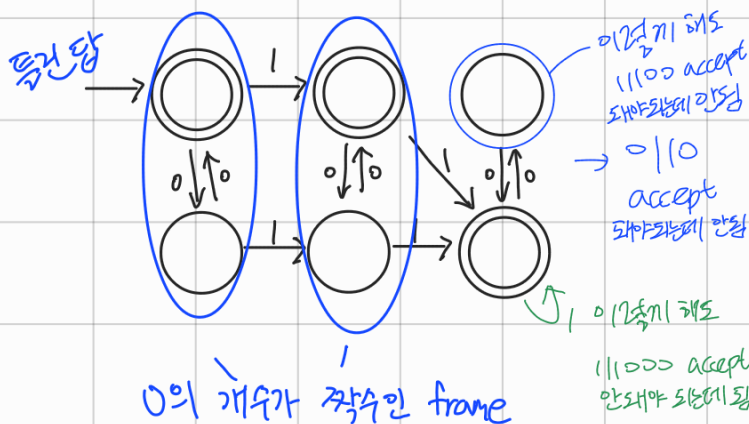
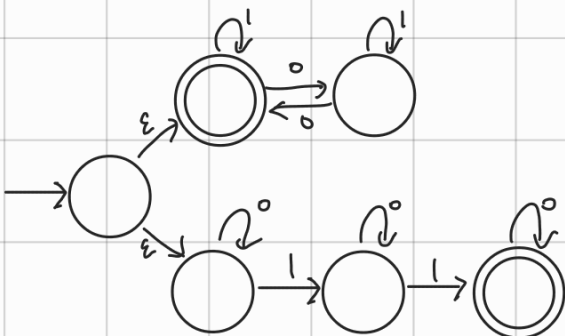
1.7(a)  $\{w : w \text{ ends with } 00.\}$  with three states



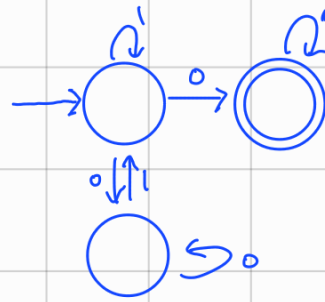
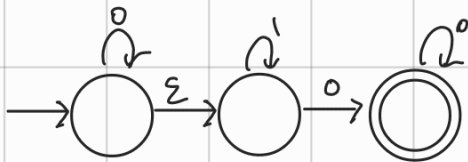
1.7(b)  $\{w : w \text{ contains the substring } 0101.\}$  with five states



1.7(c)  $\{w : w \text{ contains an even number of 0s, or contains exactly two 1s.}\}$  with six states

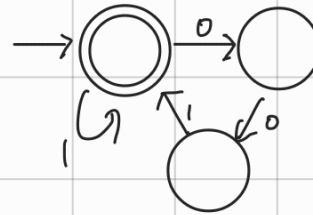
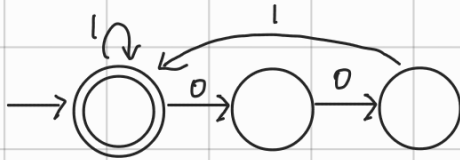


1.7(e)  $0^*1^*0^+$  with three states ( $0^+ = 0^* - \{\epsilon\} = \{0, 00, 000, \dots\}$ )



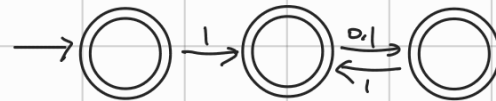
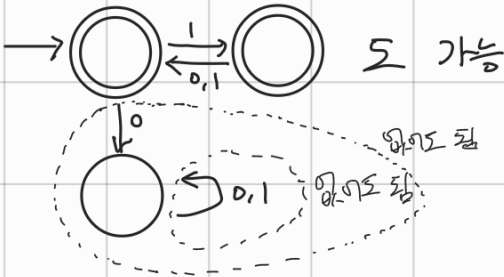
⊃  $0^*1^*1^+$   
반례: 이이0

1.7(f)  $1^*(001^+)^*$  with three states

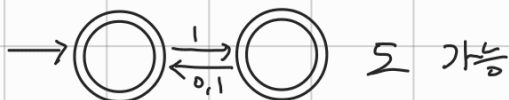


10011=01  
001도 001+로  
불수 있음

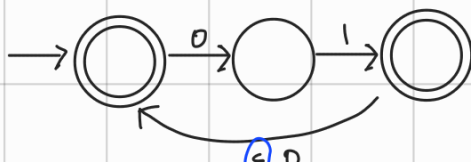
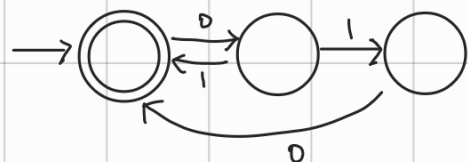
1.6(i)  $\{w : \text{every odd position of } w \text{ is a 1.}\}$  with three states



1.6(i)' Is it possible 1.6(i) with two states?



A.11  $(01 \cup 010)^*$  with three states



2,0  
0이 없으면 '이이'  
accept 안됨

