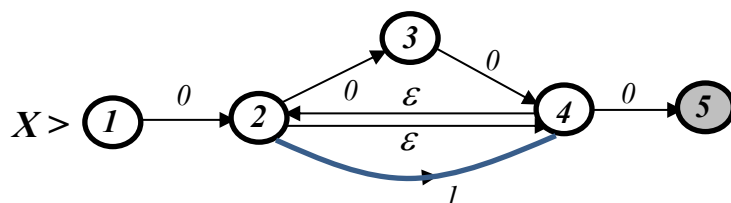# CS 302
REMOTE QUIZ 2

11 March, 2021
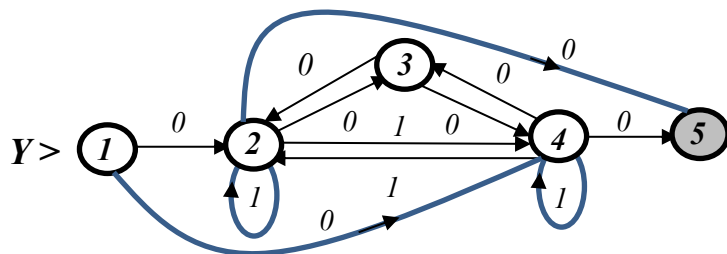
ANSWERS

For the regular expression $E = 0.(1+0.0)^*.0$
the automata X, Y and Z are given below.
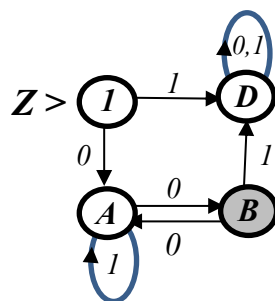
(a) (3 pts)

X > states: 1 →(0)→ 2, with states 3, 4, 5 forming the automaton with transitions 0, ε, ε, 0, 1 and 4 →(0)→ 5

(b) (3 pts)

Y > automaton with states 1, 2, 3, 4, 5 and transitions labeled 0, 1

(c) (4 pts)

Z > automaton with states 1, D, A, B and transitions labeled 0, 1

q	σ	q'
1	0	2,4 =A
1	1	∅=D
A	0	3,5=B*
A	1	A
D	0	D
D	1	D
B*	0	A
B*	1	∅