

CS 302
QUIZ 4

11 November, 2020

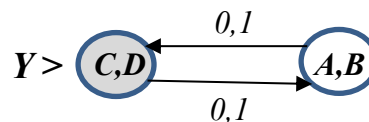
ANSWERS

(a) (2 pts) *X* is a DFA since at each state there is precisely one transition for each input.

(b) (5 pts)

	A	B	C	D
A			0	0
B			0	0
C				
D				

$A \equiv B$ and $C \equiv D$, hence *Y* is given as below :



(c) (3 pts) Any sequence of 0's and 1's with length an **even** number (including zero).