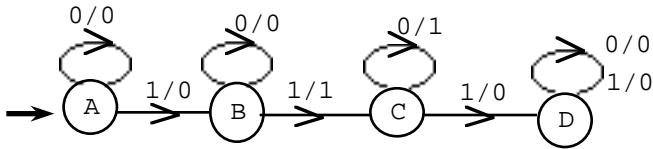
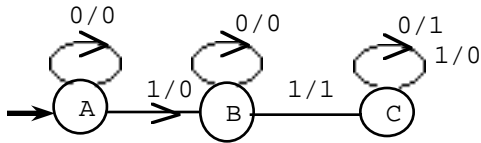


**problem 22**

Problem 2(d) in Section 5.1 asked for a DFMSM with outputs to recognize strings which contain exactly two 1's. The solution in the notes is



Does this FSM (with fewer states) work too



If you answer YES then you don't have to do anything more.  
If you answer NO then you have to find a counterexample, a specific string which the FSM recognizes when it shouldn't or a specific string which the FSM should recognize but doesn't.

**solution 22**

The new one is not right.  
It recognizes 1 1 1 0

in		1	1	1	0
out		0	1	0	1
next state	A	B	C	C	C

and it shouldn't since 1110 doesn't have exactly two 1's.