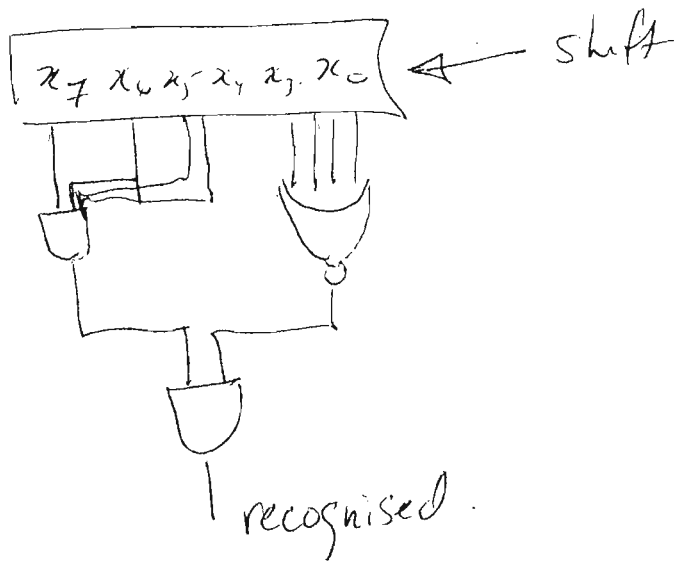
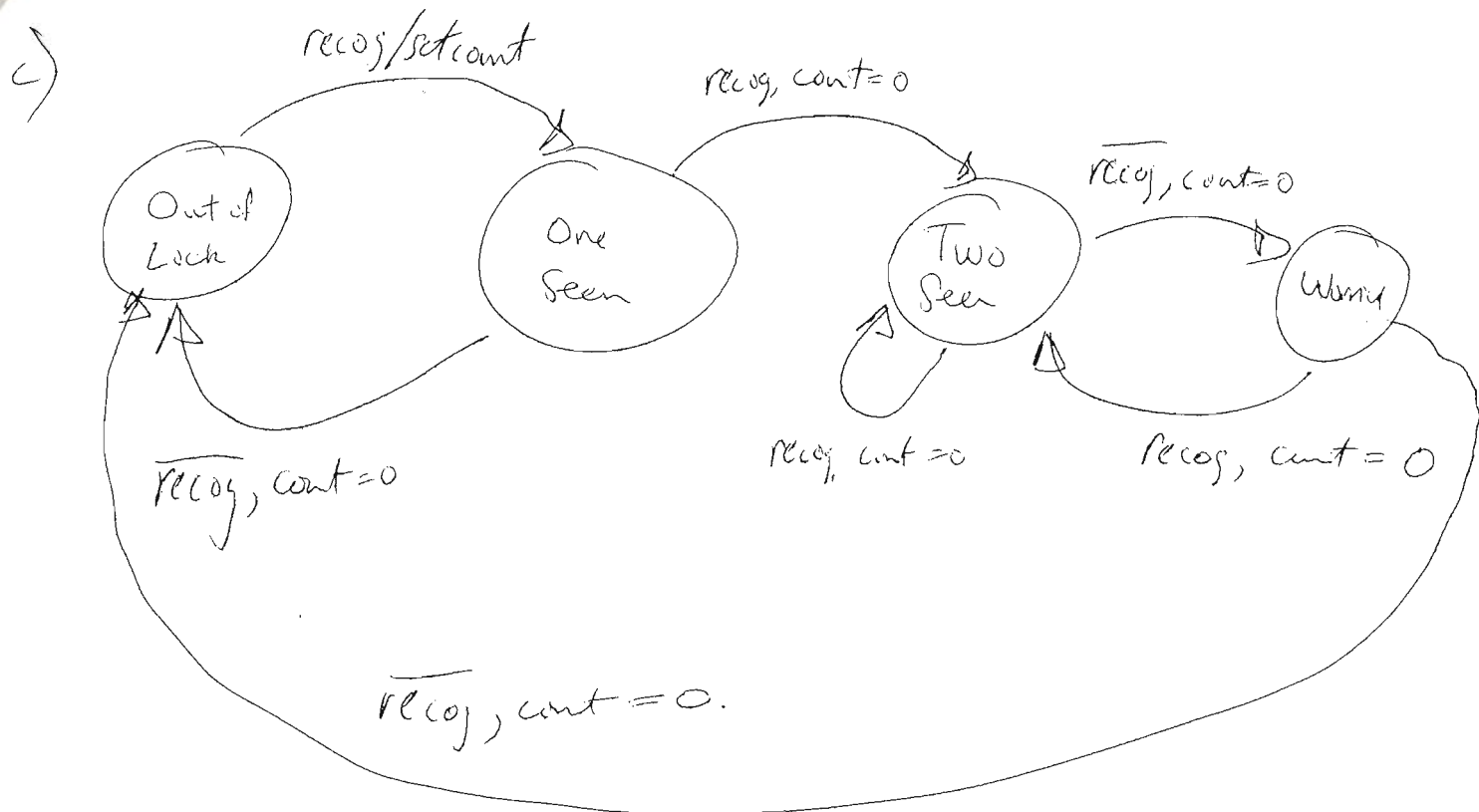


a) 1, 0, 1, 0, 1, 1, 1, 0.

x_0	x_1	x_2	x_3
0	0	0	0
1	0	0	0
0	1	0	0
1	0	1	0
0	1	0	1
1	0	1	0
1	1	0	1
1	1	1	0
0	1	1	0

b)





frame lock = two seen or worried
 frame porch = (count=0) * frame lock.

d) Flip Flops 8 for SR
 11 for Counter
 2 for FSM

Gates ~ 8 inputs for recog
 counter eg 9 going from 2 input to 10.
 FSM 2 state controls with 2 input vars
 \Rightarrow 2 eqns in 4 variables
 \therefore less than 30 gates
 so 21 FFs, less than 50 gates.