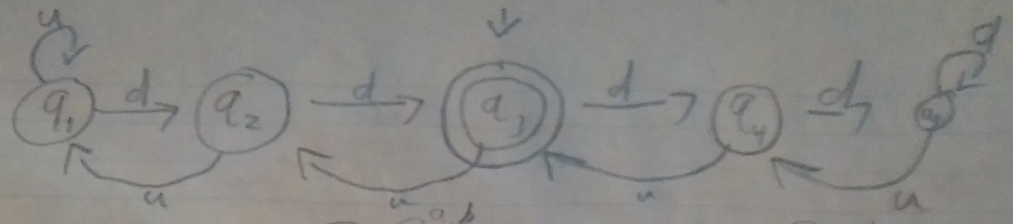
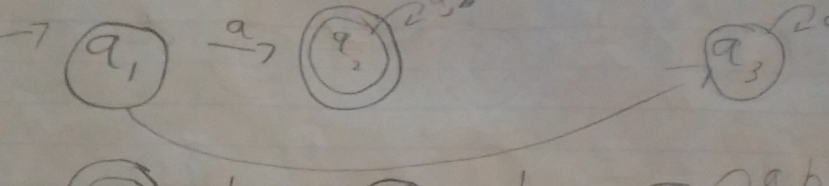
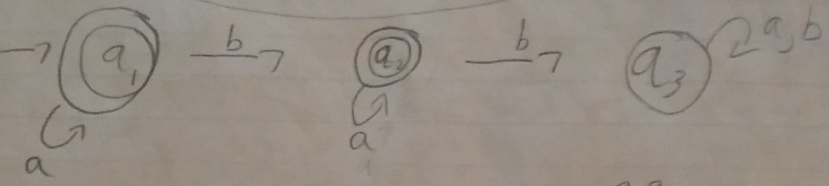
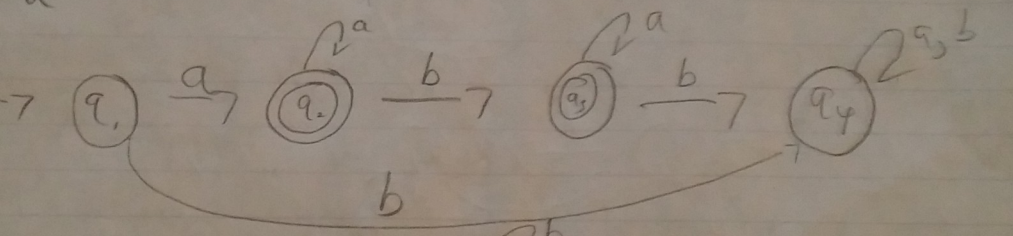
1.3



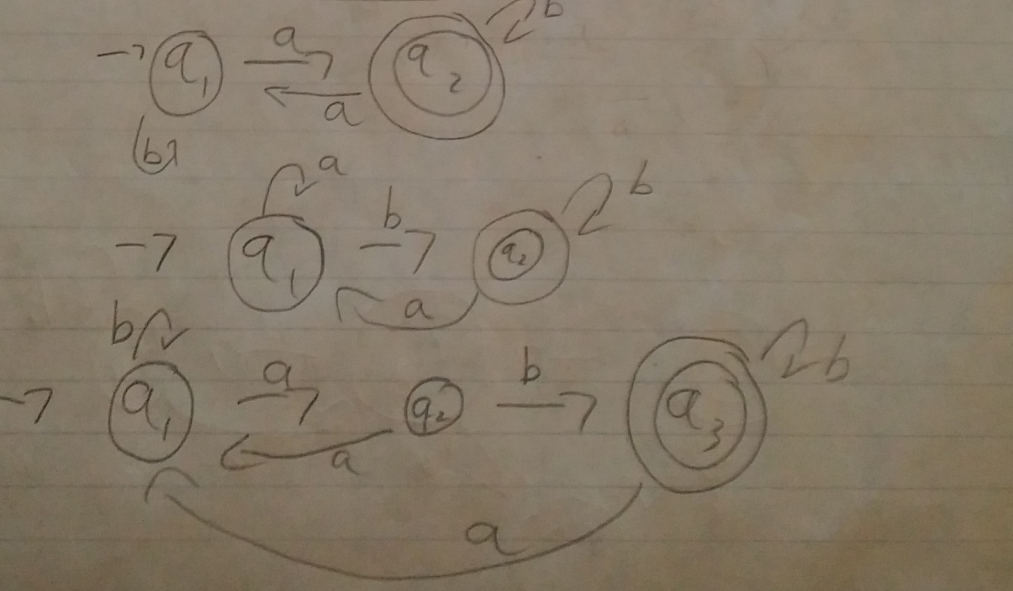
1.4e



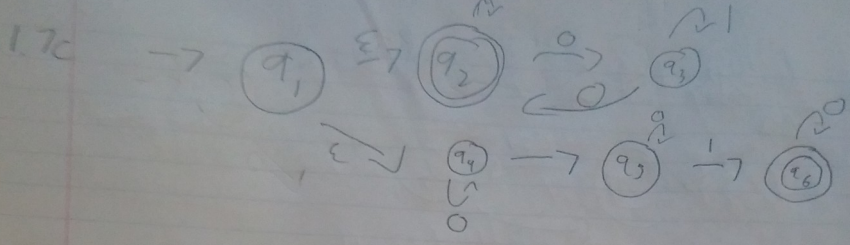




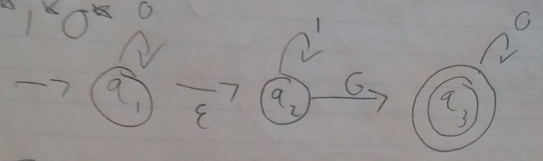
1.4f



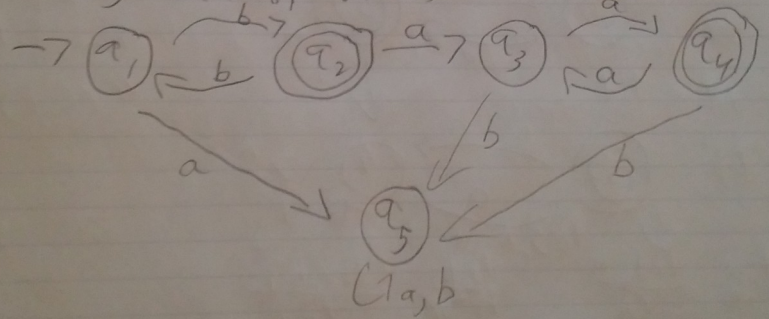
1.7c



1.7e $0^*1^*0^*0$

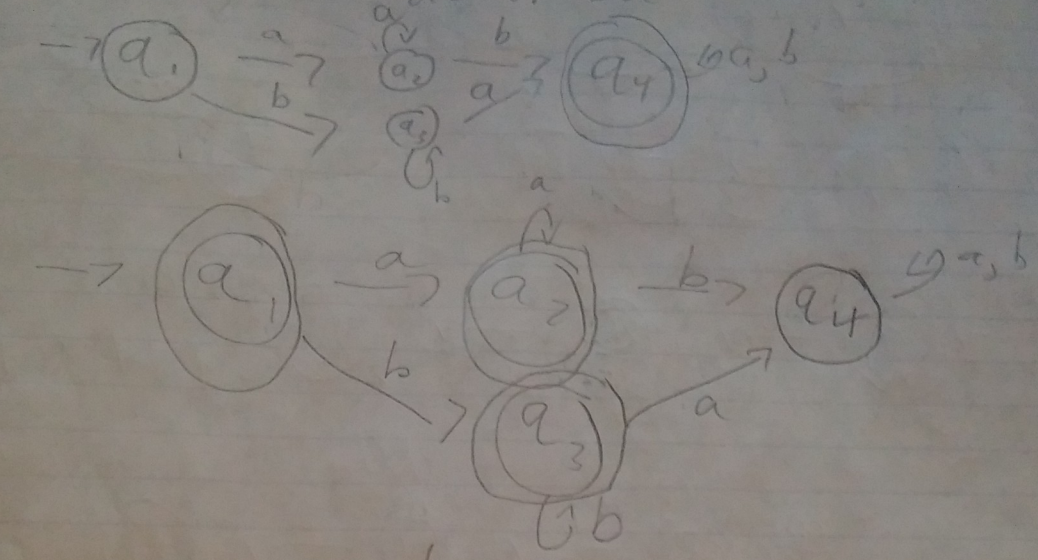


1.12 $D = \{w \mid w$ contains an even # of a's & an odd # of b's and does not contain the substring $ab\}$ → odd # of b's followed by even # of a's

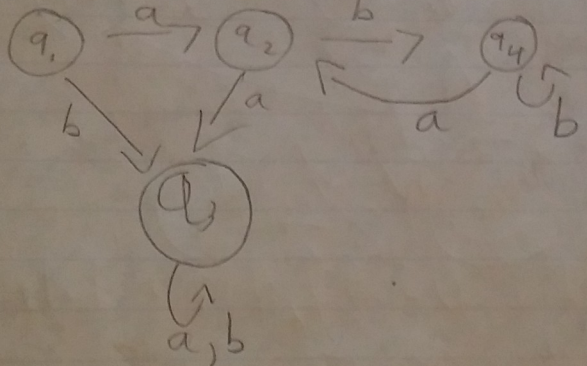


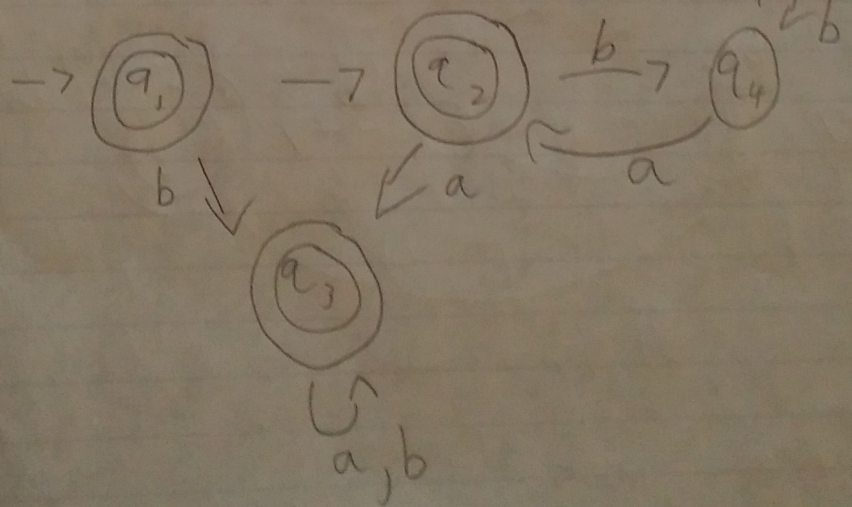
$D_1 = \{w \mid w$ contains odd # of b's$\}$
$D_1' = \{w \mid w$ contains even # of a's$\}$
$D_2 = b_1 \circ D_2$
$R_1 = b(bb)^*$ $\quad R = R_1 \circ R_2$
$R_1' = (aa)^*$
$R_2 = b(bb)^*(aa)^*$

1.5c Contains either ab or ba

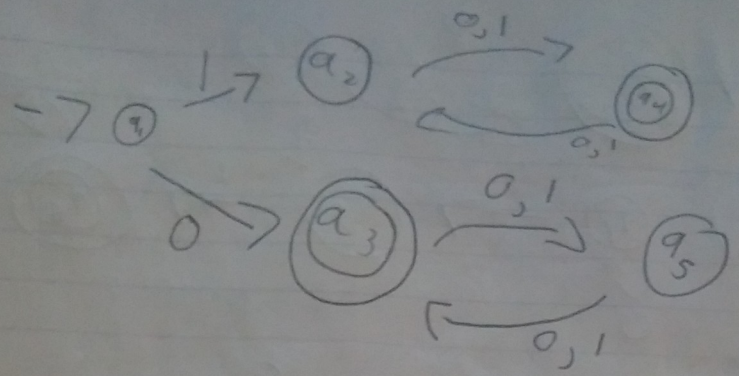


1.5e

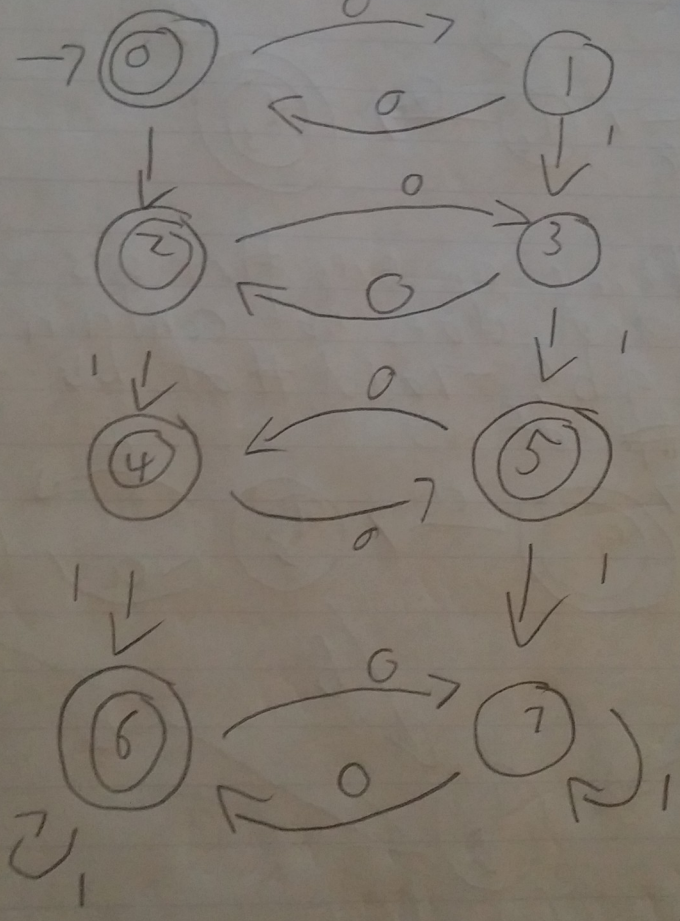




1.6 e



1.6 l



John Spicer
I pledge my honor that I have abided by the Stevens honor system.