

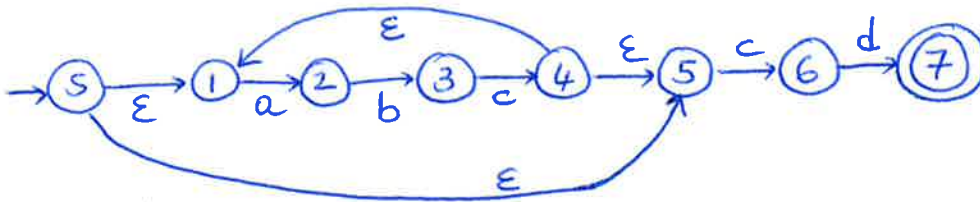
CS3350 - QUIZ 3

10 minutes / 10 points

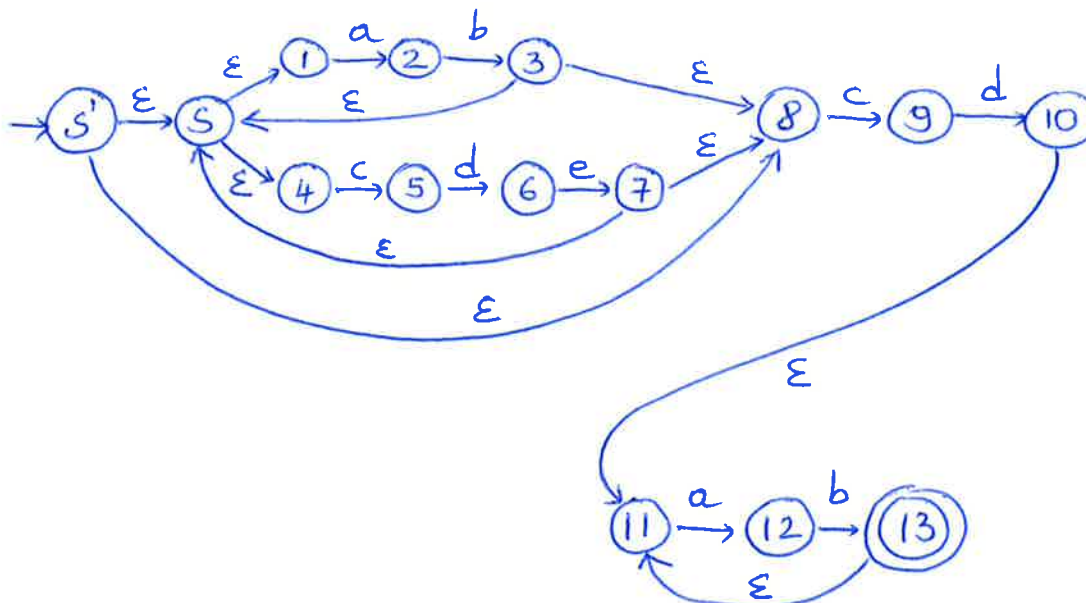
NAME: SOLUTION

September 10, 2014

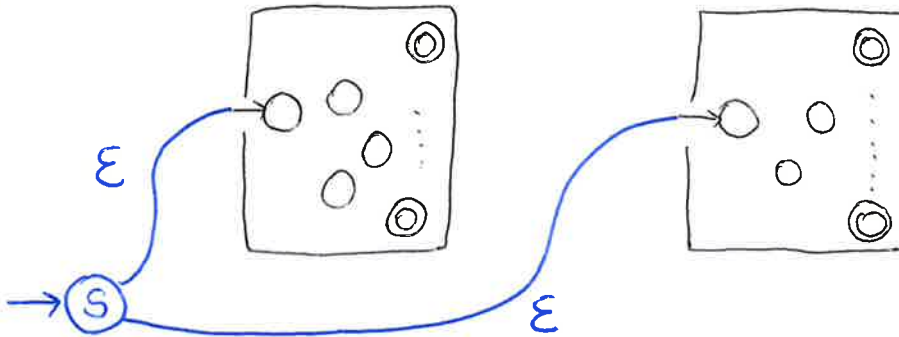
Question 1. [5 points] Build a finite automaton from smaller basic ones as seen in class for the following regular language: $L_1 = (abc)^*. cd$.



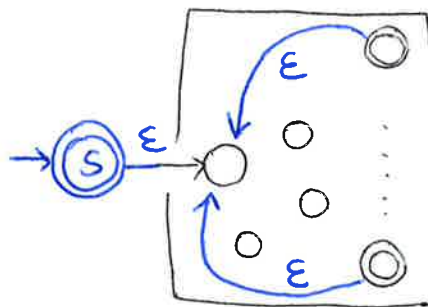
Question 2. [5 points] Build a finite automaton from smaller basic ones as seen in class for the following regular language: $L_1 = (ab \cup cde)^*. cd \cdot (ab)^+$.



Question 1. [3 points] Build the union of the following two automata:



Question 2. [3 points] Build the star of the following automaton:



Question 3. [4 points] Given the following three automata M_1 , M_2 , and M_3 , build an automaton that recognizes $(L(M_1) \cup L(M_2))^* \cdot L(M_3)$.

