

Module #3 HW

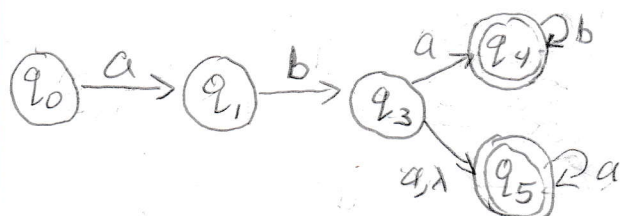
sec 2.2 # 7, 8, 12

7. For the NFA in Figure 2.9, find $\delta^*(q_0, 1010)$ and $\delta^*(q_1, 00)$.

$$\delta^*(q_0, 1010) = \{q_0, q_2\}$$

$$\delta^*(q_1, 00) = \{\}$$

8. Design an NFA with no more than five states for the set $\{abab^n : n \geq 0\} \cup \{aba^n : n \geq 0\}$



12. Find an NFA with four states for $L = \{a^n : n \geq 0\} \cup \{b^n a : n \geq 1\}$

