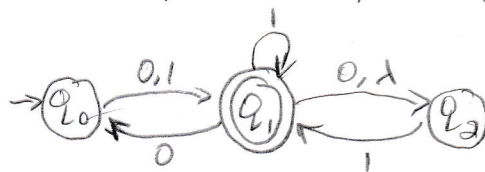


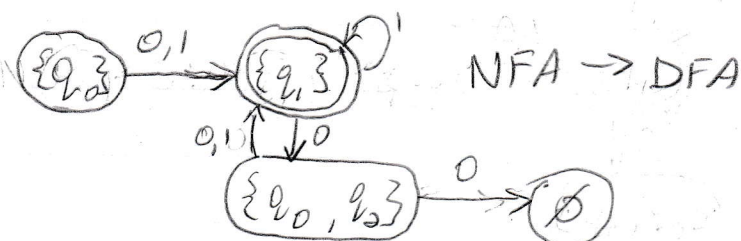
## Module 4 Homework

2. Convert the NFA in Exercise 13, sec 2.2, into an equivalent DFA.

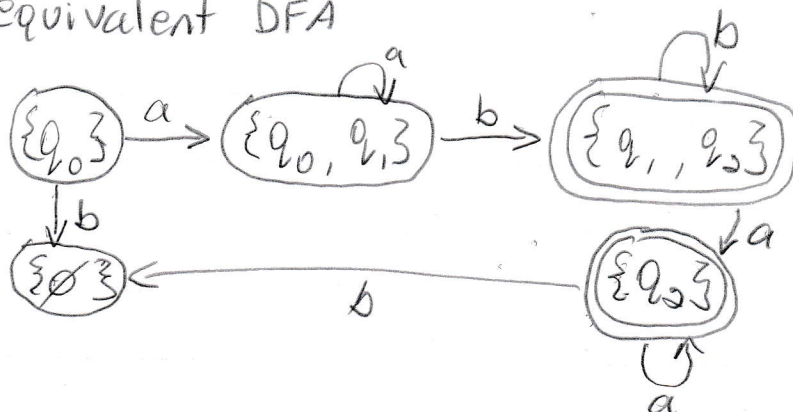
\* Exercise #13, sec 2.2



	0	1	$\lambda$
$q_0$	$\{q_1\}$	$\{q_1\}$	$\{ \}$
$q_1$	$\{q_0, q_2\}$	$\{q_1\}$	$\{q_2\}$
$q_2$	$\{ \}$	$\{q_1\}$	



4. Convert the NFA defined by  $\delta(q_0, a) = \{q_0, q_1\}$ ,  $\delta(q_1, b) = \{q_1, q_2\}$ ,  $\delta(q_2, a) = \{q_2\}$ ,  $\delta(q_0, \lambda) = \{q_2\}$  with initial state  $q_0$  and final state  $q_2$  into an equivalent DFA



14. show that if  $L$  is regular, so is  $L^R$ .

• reverse all transitions and swap the final and initial states.

