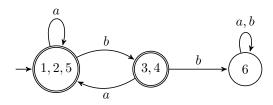
Automata and Formal Languages — Sample Solution 3

Due 30.10.2015

Solution 3.1

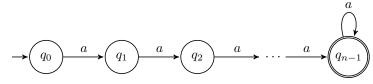
- (a) $P_l = \{\{1, 2, 5\}, \{3, 4\}, \{6\}\}\$
- (b)



(c) From left to right: L, L^b , and $L^{bb} = \emptyset$

Solution 3.2

|Q|-1 times. An example:



Solution 3.3

- (a) L(A) contains all words of length at least 2 which start and end with a's.
- (b) $\{\{q_0\}, \{q_1, q_2, q_3, q_4\}, \{q_f\}\}$
- (c)

