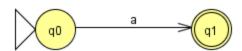
1.

- a. $\Sigma 1 \Sigma \Sigma$
- b. $0\Sigma(\Sigma\Sigma)^* \cup 1\Sigma(\Sigma\Sigma)^*$
- c. ε U (00*) U (00*11*) U (11*) U (11*00*)
- d. $(\Sigma U \epsilon)(\Sigma U \epsilon)(\Sigma U \epsilon)(\Sigma U \epsilon)$
- e. (1 U 01 U 00(1 U 0))(0 U 1)*
- f. (0(1 U 0))*0

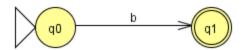
2.

a.

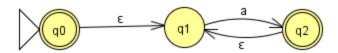
a:



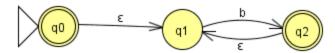
b:



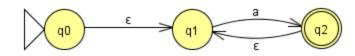
a*:



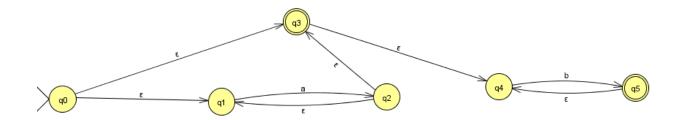
b*:



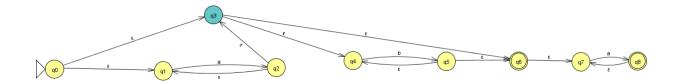
a+:



a*b*:

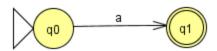


a*b*a+:



b.

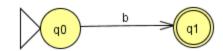
a:



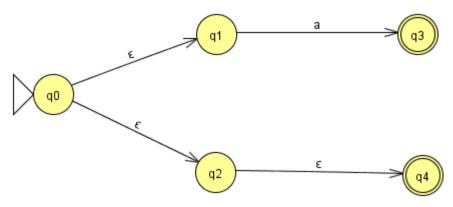
ε:



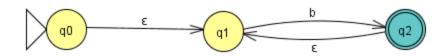
b:



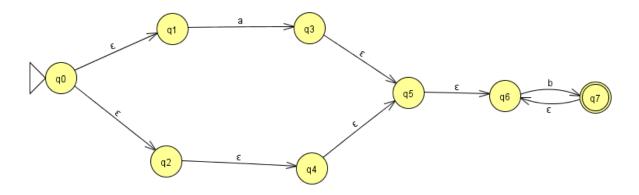
(a U ε):



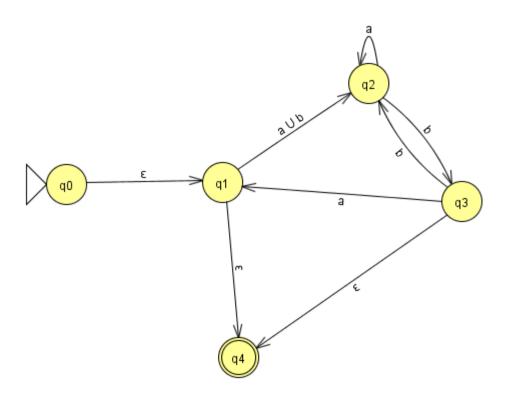
b+:



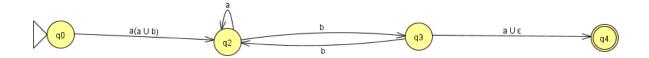
(a U ε)b+:



3.



Rip q1:



Rip q2:

