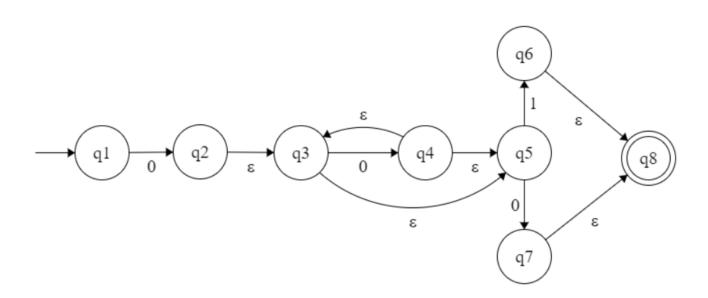
## Formleg mál og reiknanleiki

Pétur

September 24, 2018

1.

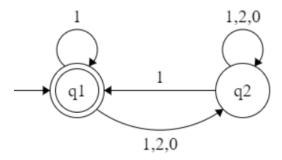


2.

 $(0*1((10*1) \cup (01*0))1)* \cup 0*$ 

3.

 $\mathbf{a})$ 

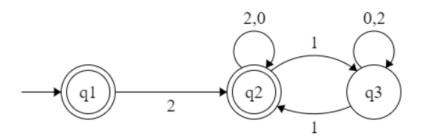


b)

 $(1^*(1 \cup 2 \cup 0)(1 \cup 2 \cup 0)^*1) \cup 1^*$ 

4.

 $\mathbf{a})$ 



**b**)

 $2((2 \cup 0) \cup (1(0 \cup 2)^*1))^*$ 

**c**)

In the input string if there are even numbers of "1" and one or more "2" and any number of "0" then the number is divisible with 2