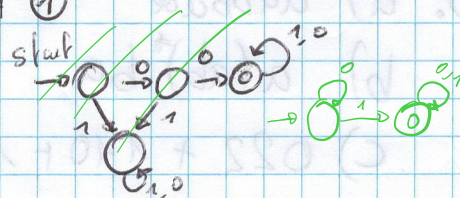
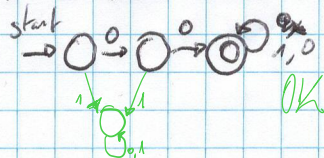
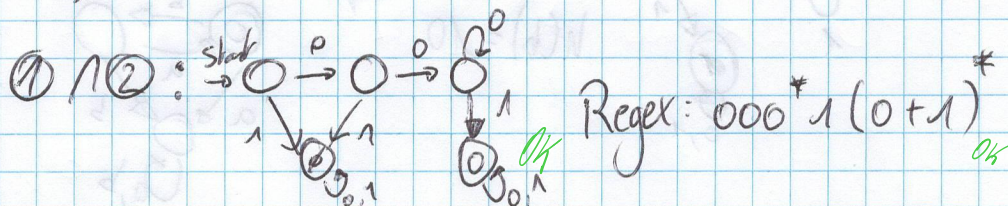
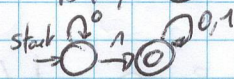
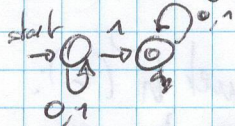


Oefeningeweek 7 - Talen & Automaten

1. NFA van $00(1+0)^* \rightarrow$ DFA ①

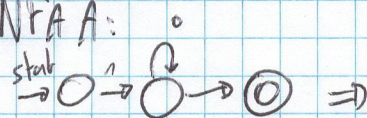


NFA van $(0+1)^* 1(0+1)^* \rightarrow$ DFA ②

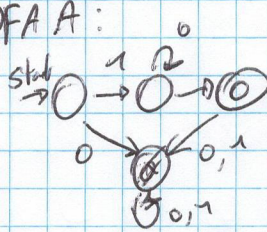


Regex: $000^* 1(0+1)^*$

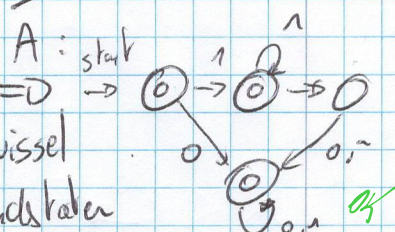
2. NFA A:



DFA A:



\bar{A} :



Regex \bar{A} :

ϵ : $\rightarrow q_0$

10^* : $\rightarrow q_1 \rightarrow q_2$

$(0+10^* 1(0+1)^*)^* \rightarrow q_0 \rightarrow q_2$

3. E-NFA van L^M - Draai alle pijlen om

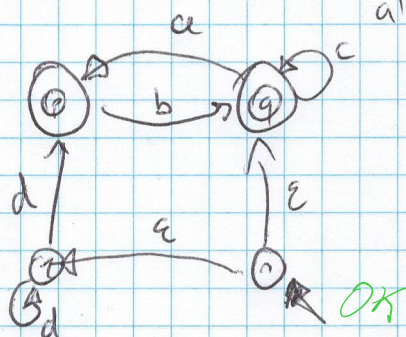
- wissel start en eindstate (start is ϵ -close van alle vorige eindstate)

① ϵ -closure(p) = $\{p\}$

" (q) = $\{q\}$

" (r) = $\{r\}$

(λ) = $\{1, q, r\}$



② DFA:

	a	b	c	d
p^*	\emptyset	q	\emptyset	\emptyset
q	p	\emptyset	q	\emptyset
r	\emptyset	\emptyset	\emptyset	r
λ	p	\emptyset	q	r
1^*	\emptyset	q	\emptyset	r
\emptyset	\emptyset	\emptyset	\emptyset	\emptyset

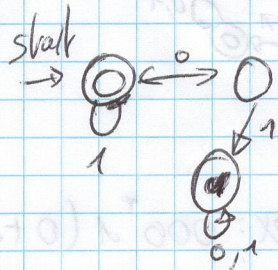
~~1. a) aabbaa~~ ~~2. a) aabbaa~~ ~~3. a) aabbaa~~ ~~4. a) aabbaa~~ ~~5. a) aabbaa~~ ~~6. a) aabbaa~~ ~~7. a) aabbaa~~ ~~8. a) aabbaa~~ ~~9. a) aabbaa~~ ~~10. a) aabbaa~~

5. a) aabbaa OK

b) $a(ab)^*ba$ OK

c) $022 + 110 + 102$ OK

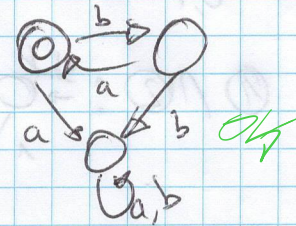
6. DFA :



$h(a) = 01$

$h(b) = 10$

⇒ DFA mit $h^{-1}(L)$:



OK