

Math 3342 Homework #9

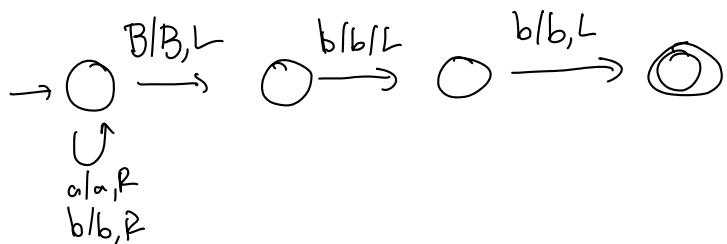
#1, 2b, 2e, 2f

$aabb$ is accepted:

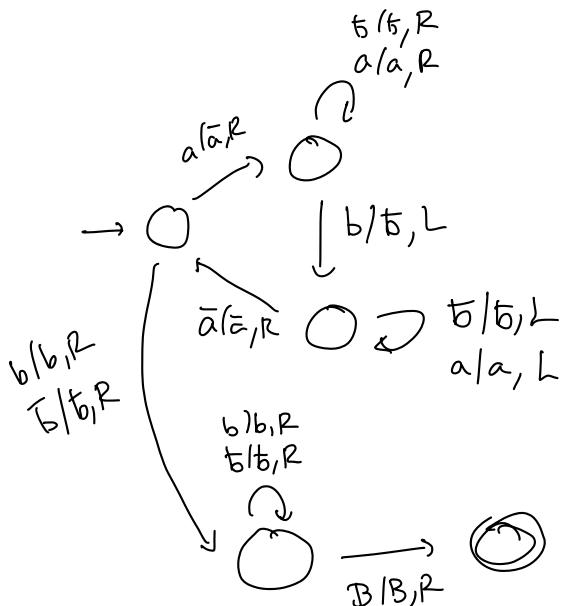
#1

$$\begin{aligned}
 1aabb &\mapsto 2abb \mapsto a2bb \mapsto ab2b \mapsto abb2B \\
 &\mapsto ab3b \mapsto a4b \mapsto 4ab \mapsto 4Bab \mapsto 1ab \\
 &\mapsto 2b \mapsto b2B \mapsto 3b \mapsto 4B \mapsto 1B \rightarrow \textcircled{5}
 \end{aligned}$$

2b $\{ \dots \times bbb \}$



2e $\{ a^n b^k \mid k \geq n \}$ ← like $a^n b^n$, but we can allow extra unmarked b's at the end.



2f $\{a^n b a^n\}$

