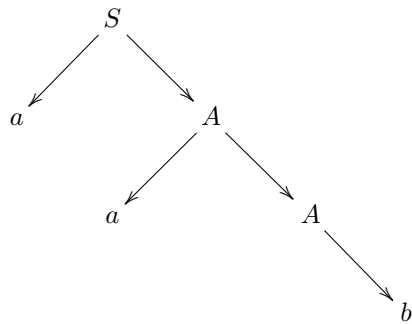# Theo 1 Abgabe 1

Nick Daiber

October 31, 2024

1

$G_1 = (\{S\}, \{a, b\}, \{S \rightarrow \varepsilon | aSa | bSb\}, S)$
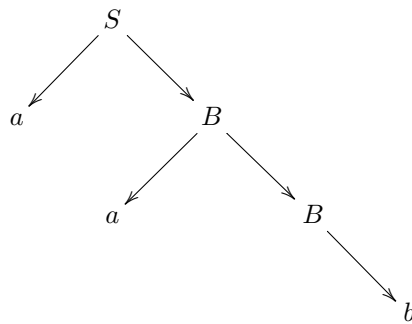$G_2 = (\{S, A\}, \{a, b\}, \{S \rightarrow AbAbAbA, A \rightarrow aA | \varepsilon\}, S)$
$G_3 = (\{E, Z, D\}, \{a, b\}, \{E \rightarrow aZ | bZ, Z \rightarrow aD | bD, D \rightarrow \varepsilon | aE | bE\}, E)$

2

2.1 a

2.2 b

2.3   c

$G = (\{A, B\}, \{a, b\}, \{A \to aB | Bb, B \to aB | bB | a | b\}, A)$