

Homework 4 & 5

Date

$$\begin{aligned} E &\rightarrow E_1 T \mid T^* F \mid (E) \mid a \mid b \mid 0 \mid 1 \\ T &\rightarrow T^* F \mid (E) \mid a \mid b \mid 0 \mid 1 \\ F &\rightarrow (E) \mid a \mid b \mid 0 \mid 1 \\ \mid &\rightarrow a \mid b \mid a \mid b \mid 0 \mid 1 \end{aligned}$$

$$\begin{aligned} E &\rightarrow EY_1 \mid TY_2 \mid X_3Y_3 \mid Y_4 \mid Y_5 \mid Y_6 \mid Y_7 \\ &\quad Y_8 \mid Y_9 \end{aligned}$$

$$T \rightarrow TY_2 \mid X_3Y_3 \mid Y_4 \mid Y_5 \mid Y_6 \mid Y_7$$

$$F \rightarrow X_3Y_3 \mid Y_4 \mid Y_5 \mid Y_6 \mid Y_7$$

$$\mid \rightarrow a \mid b \mid Y_4 \mid Y_5 \mid Y_6 \mid Y_7$$

$$Y_1 \rightarrow X_1 T$$

$$X_1 \rightarrow +$$

$$Y_2 \rightarrow X_2 F$$

$$X_2 \rightarrow *$$

$$X_3 \rightarrow X_4 F$$

$$X_4 \rightarrow ($$

$$Y_3 \rightarrow)$$

$$Y_4 \rightarrow a$$

$$Y_5 \rightarrow b$$

$$Y_6 \rightarrow 0$$

$$Y_7 \rightarrow 1$$

Date

Question 2

1 → a2 1 b3

2 → a2 1 b4

3 → b3 + a5

4 → b4 1 a2 1λ

5 → a5 1 b3 1λ