

ESEMIO B

$$4) \text{EXP1} ::= \text{EXP1} \text{ '+' EXP1 } \mid \text{EXP2}$$

$$\text{EXP2} ::= \text{EXP2} \text{ 'x' EXP2 } \mid \text{EXP3}$$

$$\text{EXP3} ::= \text{NUM} \mid \text{'(' EXP1 ')')}$$

$$\text{NUM} ::= \text{'0'} \mid \text{'1'}$$

$$\text{EXP1} \rightarrow \text{EXP1} + \text{EXP1}$$

$$\text{EXP1} + \text{EXP1} \rightarrow \text{EXP2} + \text{EXP1}$$

$$\text{EXP2} + \text{EXP1} \rightarrow \text{EXP3} + \text{EXP1}$$

$$\text{EXP3} + \text{EXP1} \rightarrow \text{NUM} + \text{EXP1}$$

$$\text{NUM} + \text{EXP1} \rightarrow 0 + \text{EXP1}$$

$$0 + \text{EXP1} \rightarrow 0 + \text{EXP2}$$

$$0 + \text{EXP2} \rightarrow 0 + \text{EXP2} * \text{EXP2}$$

$$0 + \text{EXP2} * \text{EXP2} \rightarrow 0 + \text{EXP3} * \text{EXP2}$$

$$0 + \text{EXP3} * \text{EXP2} \rightarrow 0 + \text{NUM} * \text{EXP2}$$

$$0 + \text{NUM} * \text{EXP2} \rightarrow 0 + 1 * \text{EXP2}$$

$$0 + 1 * \text{EXP2} \rightarrow 0 + 1 * \text{EXP3}$$

$$0 + 1 * \text{EXP3} \rightarrow 0 + 1 * \text{NUM}$$

$$0 + 1 * \text{NUM} \rightarrow 0 + 1 * 0$$

$$5) \text{EXP1} \rightarrow \text{EXP2}$$

$$\text{EXP2} \rightarrow \text{EXP2} * \text{EXP2}$$

$$\text{EXP2} * \text{EXP2} \rightarrow \text{EXP2} * \text{EXP2} * \text{EXP2}$$

$$\text{EXP2} * \text{EXP2} * \text{EXP2} \rightarrow \text{EXP3} * \text{EXP2} * \text{EXP2}$$

$$\text{EXP3} * \text{EXP2} * \text{EXP2} \rightarrow \text{NUM} * \text{EXP2} * \text{EXP2}$$

$$\text{NUM} * \text{EXP2} * \text{EXP2} \rightarrow 0 * \text{EXP2} * \text{EXP2}$$

$$0 * \text{EXP2} * \text{EXP2} \rightarrow 0 * \text{EXP3} * \text{EXP2}$$

$$0 * EXP3 * EXP2 \rightarrow 0 * NUM * EXP2$$

$$0 * NUM * EXP2 \rightarrow 0 * 1 * EXP2$$

$$0 * 1 * EXP2 \rightarrow 0 * 1 * EXP3$$

$$0 * 1 * EXP3 \rightarrow 0 * 1 * NUM$$

$$0 * 1 * NUM \rightarrow 0 * 1 * 0$$

7)

$$EXP \rightarrow EXP2 + EXP1$$

$$EXP2 + EXP1 \rightarrow EXP3 + EXP1$$

$$EXP3 + EXP1 \rightarrow NUM + EXP1$$

$$NUM + EXP1 \rightarrow 0 + EXP1$$

$$0 + EXP1 \rightarrow 0 + EXP2$$

$$0 + EXP2 \rightarrow 0 + EXP3 * EXP2$$

$$0 + EXP3 * EXP2 \rightarrow 0 + NUM * EXP2$$

$$0 + NUM * EXP2 \rightarrow 0 + 1 * EXP2$$

$$0 + 1 * EXP2 \rightarrow 0 + 1 * EXP3$$

$$0 + 1 * EXP3 \rightarrow 0 + 1 * NUM$$

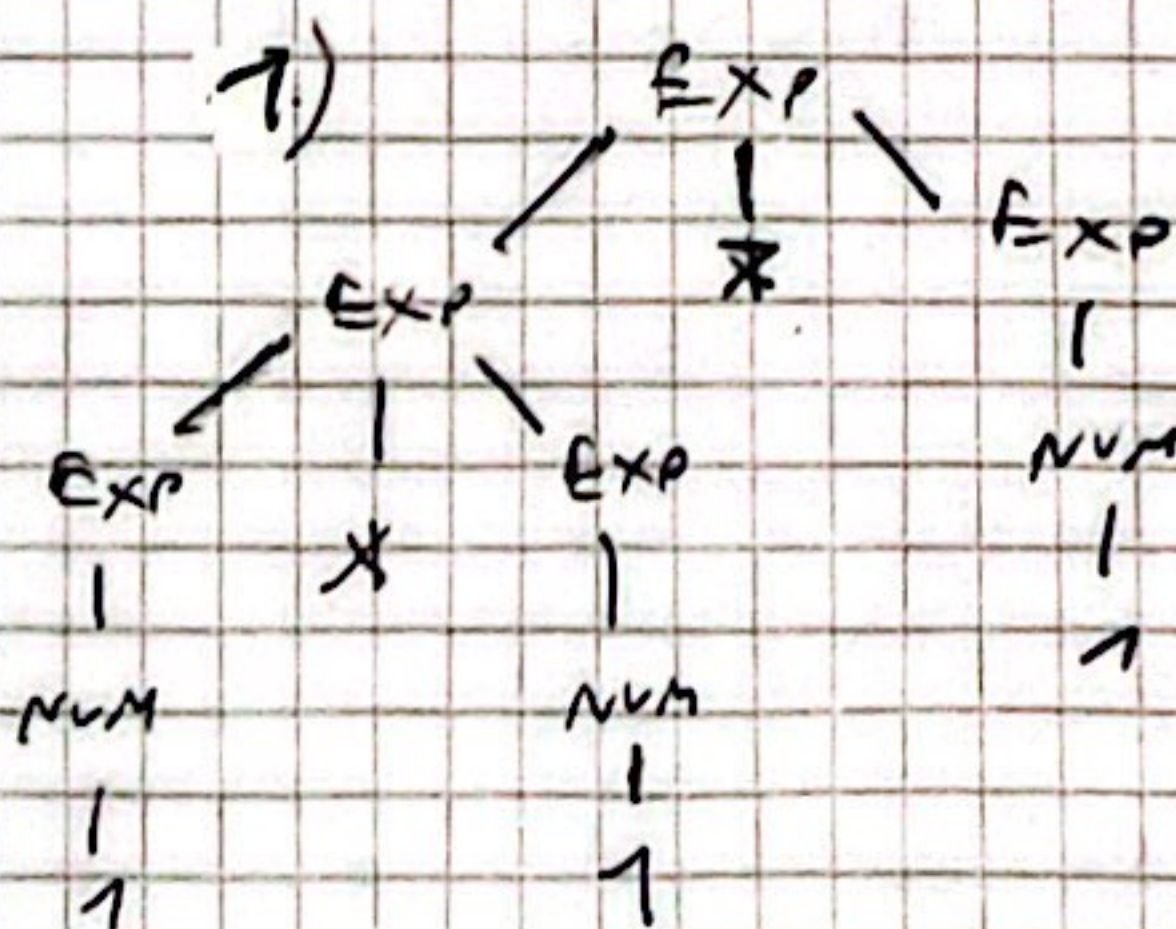
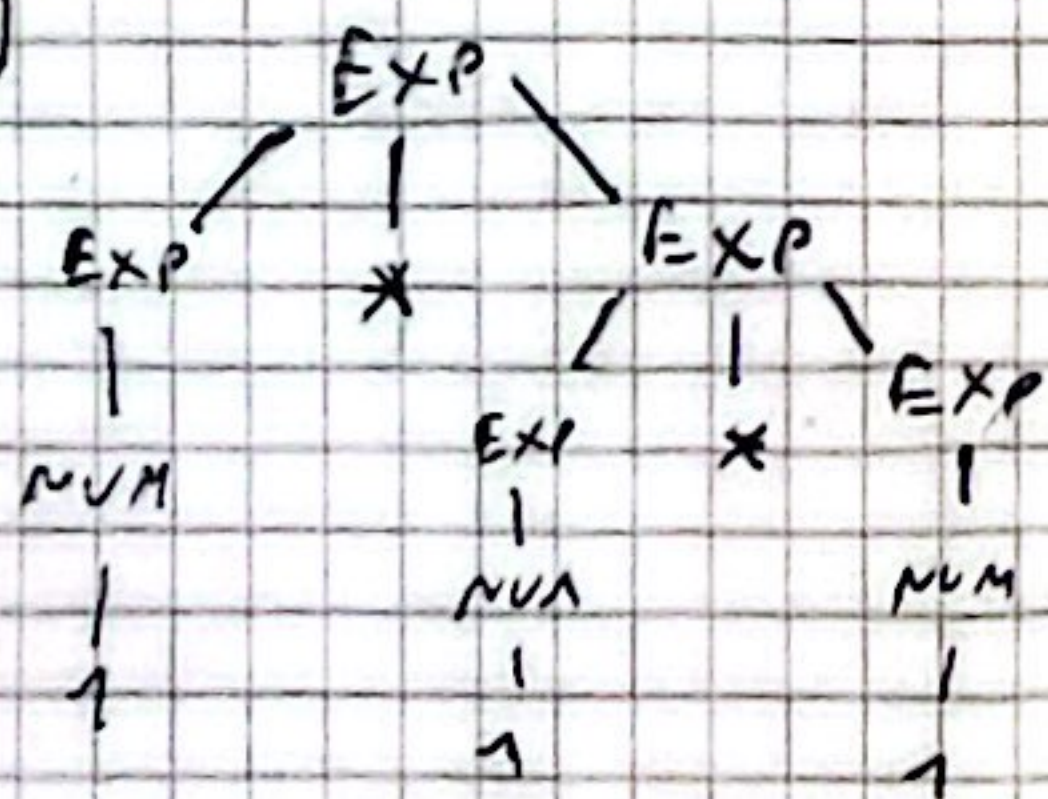
$$0 + 1 * NUM \rightarrow 0 + 1 * 0$$

ESEMPIO C

esempio

$1 * 1 * 1$ lo posso interpretare come $(1 * 1) * 1$ e $1 * (1 * 1)$

2)



ESEMPIO 2

PER DIMOSTRARE LA SUA AMBIGUITA' DEVO DIMOSTRARE CHE HO DUE ALBEN DI DERIVAZIONE DIVERSI.

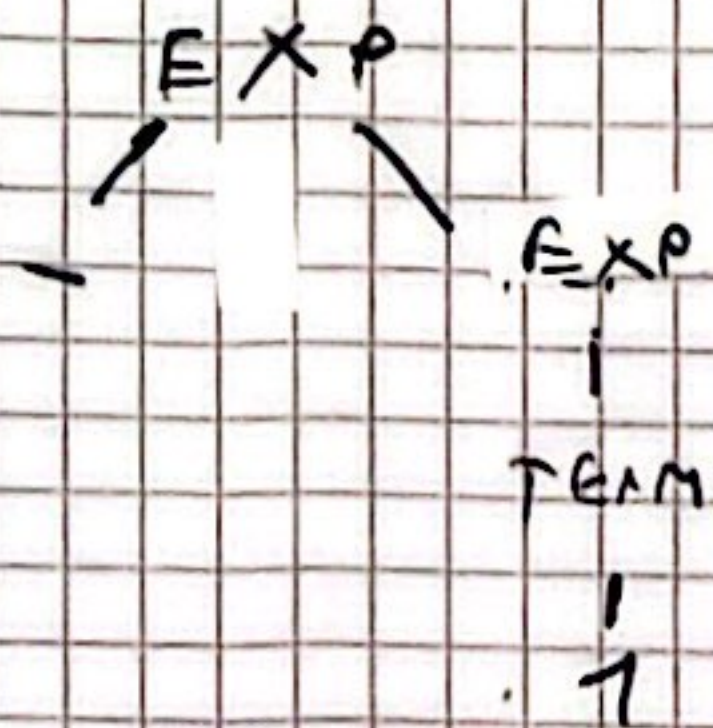
PRENDIAMO COME STRINGA "11"

1 DERIVAZIONE:

$$EXP \rightarrow \sim EXP$$

$-EXP \rightarrow -TEAM$

$-TEAM \rightarrow -1$

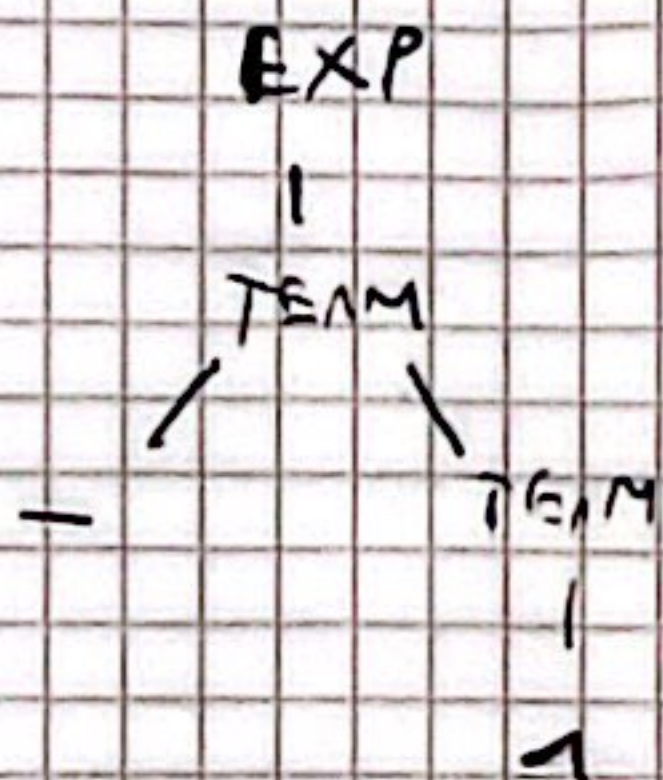


2 Derivaciones:

$EXP \rightarrow TEAM$

$TEAM \rightarrow -TEAM$

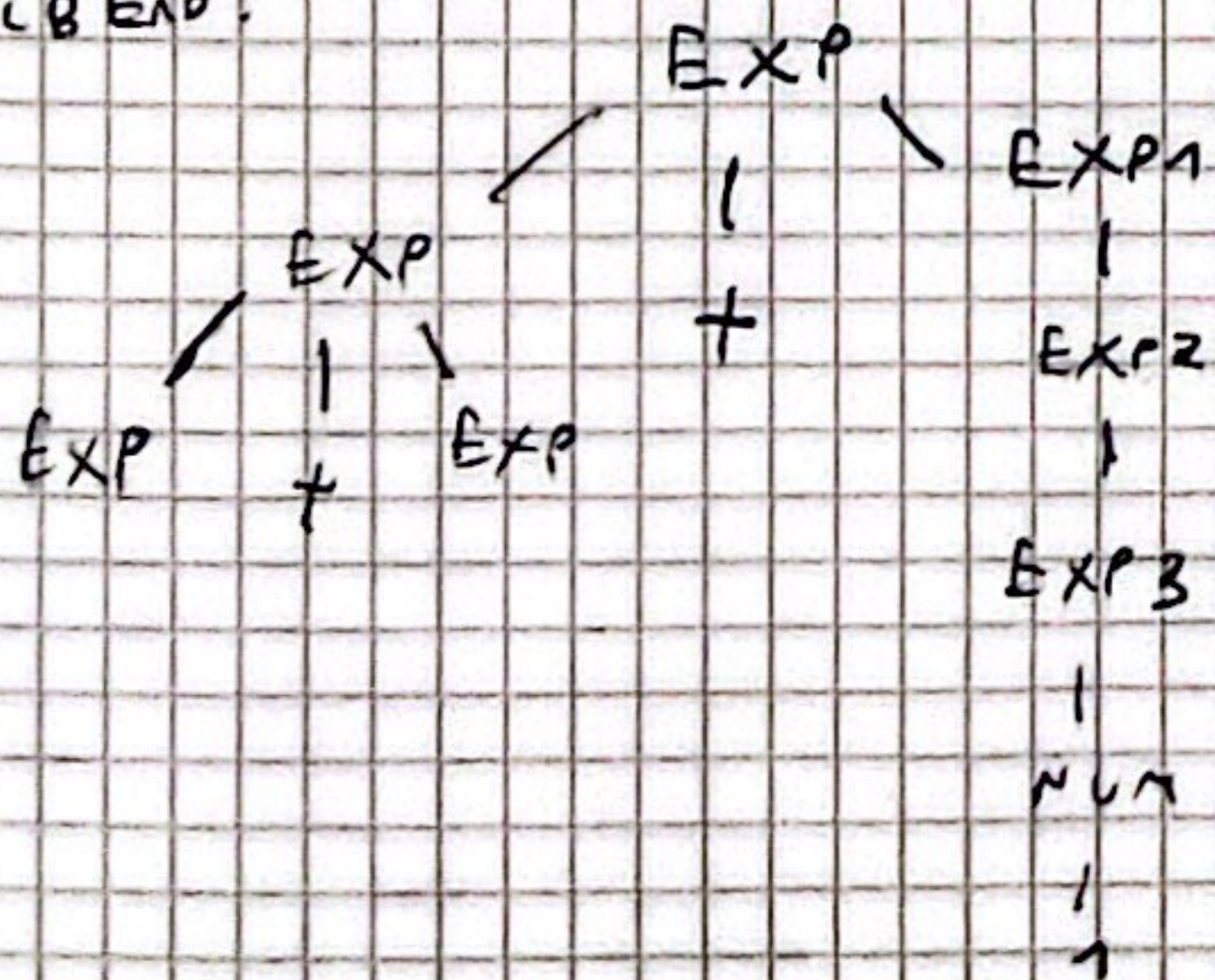
$-TEAM \rightarrow -1$



EJERCICIO D

1) $EXP1 + EXP1$ E' AMBIGUA PENSAR EN EJEMPLO POTRER
AVERE "1 + 2 + 1".

1 ALBENO:



2 ALBENO:

