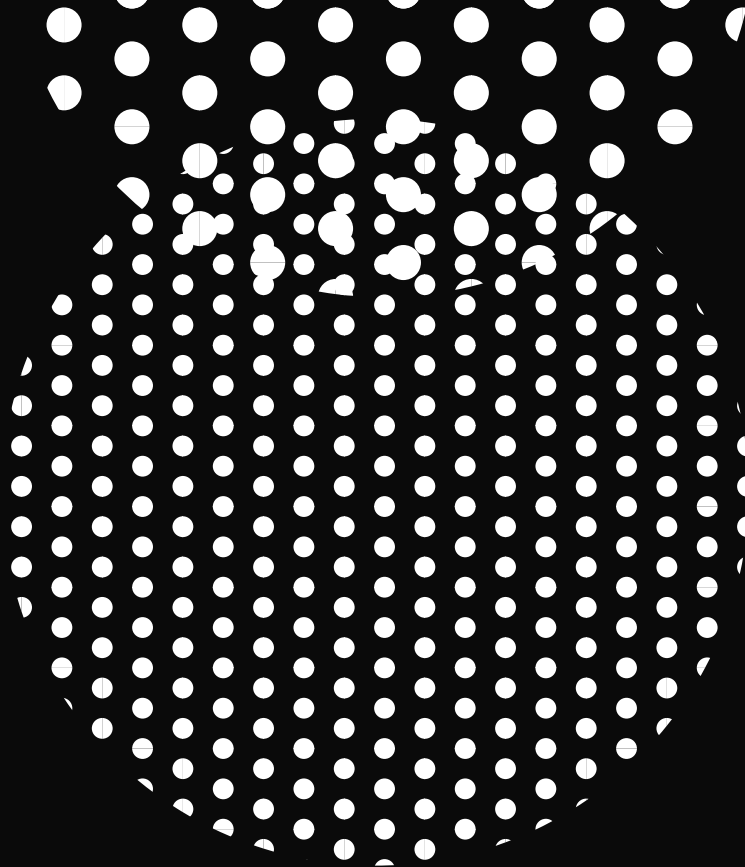
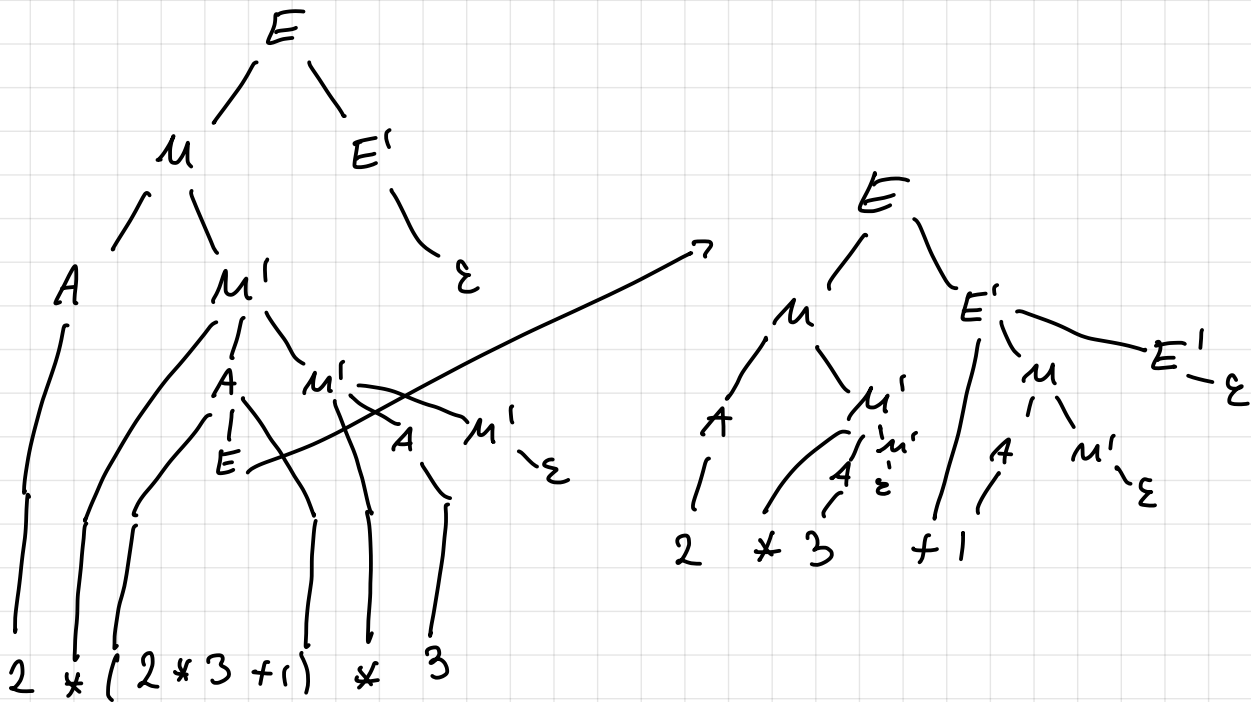
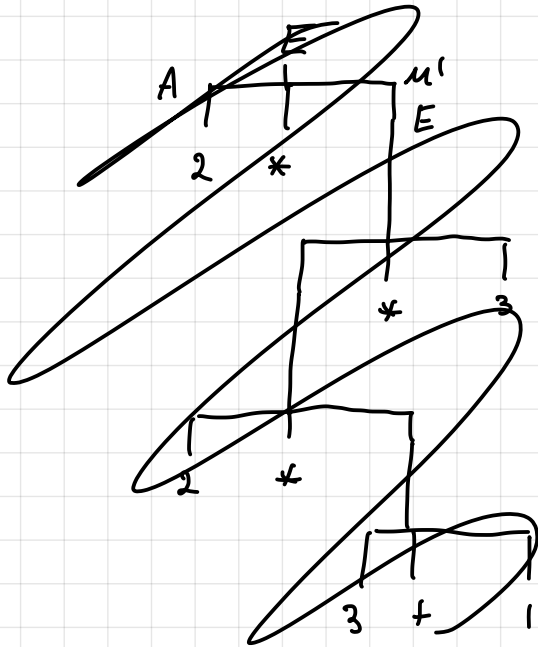


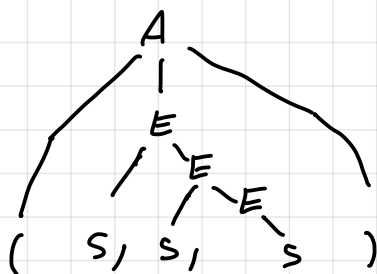


exercice 1



exercice 2

$$1. \begin{aligned} A &\rightarrow (E) \\ E &\rightarrow s, E \\ &\quad | s \end{aligned}$$



$$2. \begin{aligned} A &\rightarrow (E) \\ E &\rightarrow E' \\ &\quad | '' \quad \varepsilon? \\ E' &\rightarrow s, E' \\ &\quad | s \end{aligned}$$

3. E' peut prendre soit $\varnothing, E'$
soit $\varnothing$

E' ne peut pas prendre "",

d'où "" peut être seulement comme (),
d'où (S.S.) n'est pas possible.

Exercice 3

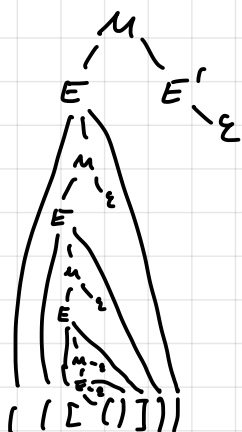
$$E \rightarrow (M) \mid \varepsilon$$

$$M \rightarrow EM'$$

$$M' \rightarrow [M] \mid \varepsilon$$

$$E \rightarrow (M) \mid [M]$$

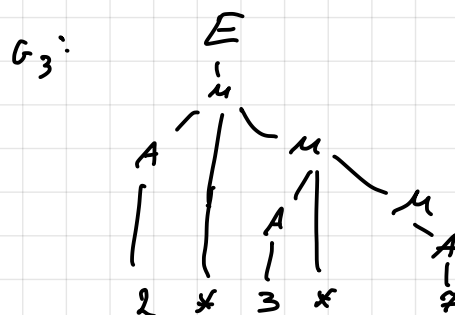
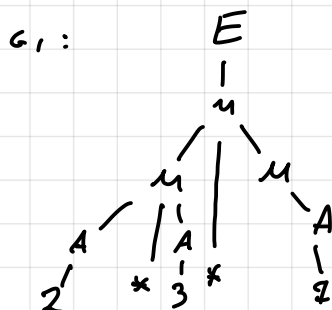
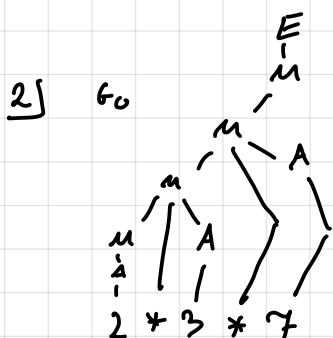
donc: $M \rightarrow EM \mid \varepsilon$



Exercice 4

1. G_2 : On peut ^{pas} faire $n_1 * n_2 * n_3$
dans G_0 - possible

G_4 : $(3 * 7)$ - impossible, dans G_0 possible



Q.:

$$3. \quad E \rightarrow E + M$$

$| M$

$$M \rightarrow M * Q$$

$| Q$

$$Q \rightarrow Q - A$$

$| A$

$$A \rightarrow (E)$$

$| n$

Exercise 5