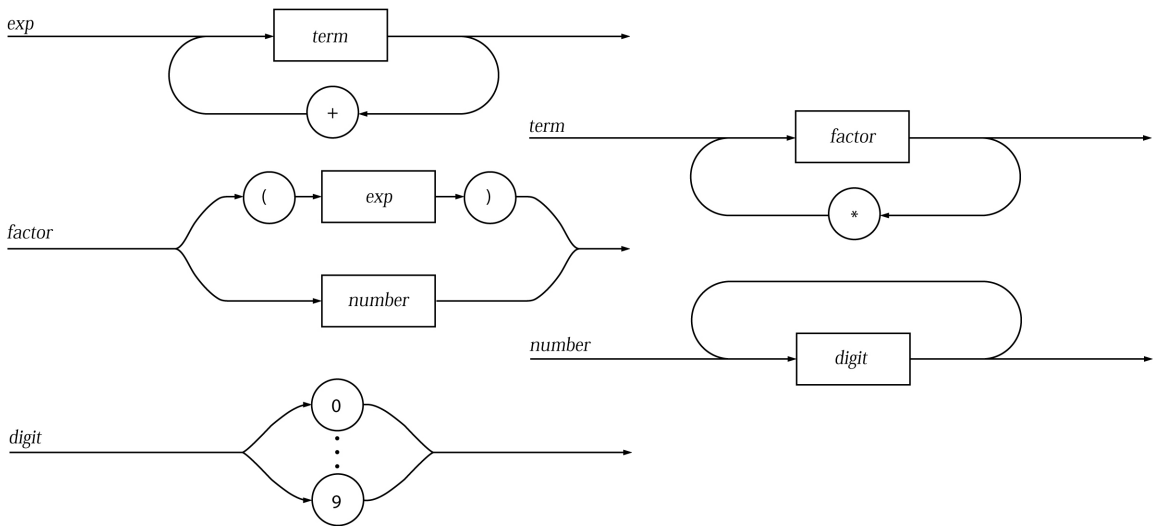
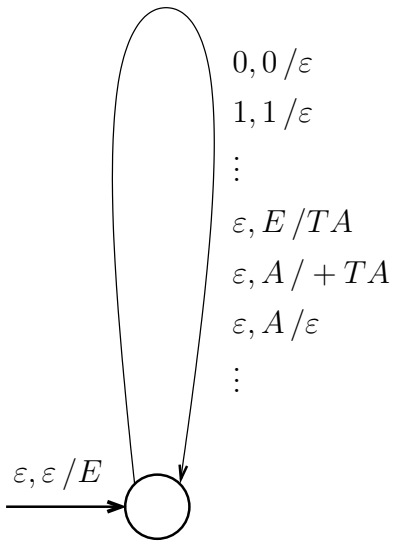
Syntax diagram to BNF



$$
\begin{aligned}
\langle exp \rangle &::= \langle term \rangle \, [+ \langle term \rangle]^* \\
\langle factor \rangle &::= \{ \, (\langle exp \rangle) \, \} \mid \langle number \rangle \\
\langle digit \rangle &::= \mathbf{0} \mid \mathbf{1} \mid \mathbf{2} \mid \mathbf{3} \mid \mathbf{4} \mid \mathbf{5} \mid \mathbf{6} \mid \mathbf{7} \mid \mathbf{8} \mid \mathbf{9}
\end{aligned}
$$

BNF to CFG

$$
\begin{aligned}
E &\longrightarrow T\,A \\
A &\longrightarrow +\,T\,A \mid \varepsilon \\
N &\longrightarrow DN \mid D
\end{aligned}
$$

CFG to PDA