

## Zadanie 6

$$G = \langle \sigma, V, S, P \rangle$$

$$V = \{S, T\}$$

$$\sigma = \{0, 1\}$$

1.

$$L = \{0^n 1^m 0^n \mid n, m \in N\}$$

$$P = \{S \rightarrow \epsilon \mid 0S0 \mid T, T \rightarrow 1T \mid \epsilon\}$$

2.

$$L = \{0^n 1^n 0^m \mid n, m \in N\}$$

$$P = \{S \rightarrow \epsilon \mid S0 \mid T, T \rightarrow 0S1 \mid \epsilon\}$$

3.

$$L = \{0^n 1^m 0^k \mid n, m \in N\}$$

$$P = \{S \rightarrow \epsilon \mid S0 \mid T, T \rightarrow 0S1 \mid \epsilon\}$$

4.

$$L = \{(01)^n 0^{2n} \mid n \in N\}$$

$$P = \{S \rightarrow \epsilon \mid 01S00\}$$

5.

$$L = \{ \text{ciągi } 01, \text{ taka sama liczba zer i jedynek} \}$$

$$P = \{S \rightarrow \epsilon \mid 0S1 \mid 01S \mid 10S \mid 1S0 \mid S01 \mid S10\}$$

6.

$$L = \{ \text{ciągi } 01, \text{ dwa razy więcej zer niż jedynek} \}$$

$$P = \{S \rightarrow \epsilon \mid 00S1 \mid 001S \mid 100S \mid 1S00 \mid S001 \mid S100\}$$