Lista 10

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a) $\{0^n 1^n 2^k \mid n, k \geq 0\}$

$P \to AB$ 2^n

$A \to 0A1 \mid \lambda$

$B \to 2B \mid \lambda$

b) $\{0^n 1 2^n \mid n \geq 0\}$

$P \to 0P2 \mid 1$ no momento que $P \to 1$ acaba

c) $\{w 0 w^R \mid w \in \{1,2\}^*\}$

$P \to 1P1 \mid 2P2 \mid 0$ $122 \, (0) \, 221$

d) $\{0^n 1^m \mid m > n\}$

No caso, queremos que tenha no mínimo um 1 a mais.

$P \to 0P1 \mid P1 \mid 1$

e) $\{0^n 1^n \mid n \geq 0\} \cup \{0^n 1 2^n \mid n \geq 0\}$

$\quad\quad P \to 0P1 \mid \lambda \quad\quad\quad P \to 0P2 \mid 1$

Logo:

$P \to A \mid B$

$A \to 0A1 \mid \lambda$

$B \to 0B2 \mid 1$