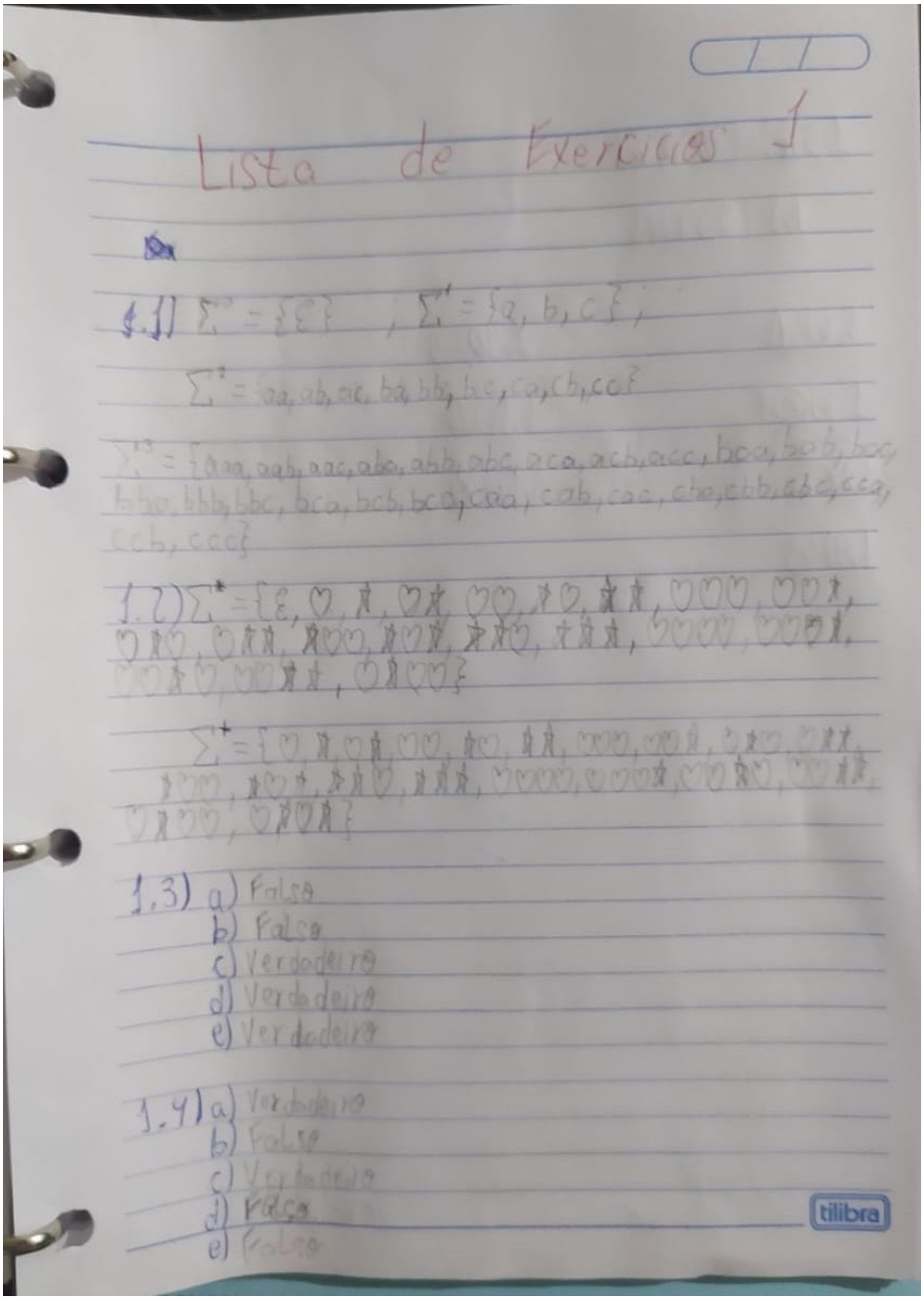
Lista de Exercícios 1 – Victor Ramos



Lista de Exercícios 1

1.1) $\Sigma^0 = \{\varepsilon\}$; $\Sigma^1 = \{a, b, c\}$,

$\Sigma^2 = \{aa, ab, ac, ba, bb, bc, ca, cb, cc\}$

$\Sigma^3 = \{aaa, aab, aac, aba, abb, abc, aca, acb, acc, baa, bab, bac, bba, bbb, bbc, bca, bcb, bcc, caa, cab, cac, cba, cbb, cbc, cca, ccb, ccc\}$

1.2) $\Sigma^* = \{\varepsilon, ♡, ★, ♡★, ♡♡, ★♡, ★★, ♡♡♡, ♡♡★, ♡★♡, ♡★★, ★♡♡, ★♡★, ★★♡, ★★★, ♡♡♡, ♡♡★, ♡♡★♡, ♡♡★★, ♡★♡♡, ...\}$

$\Sigma^+ = \{♡, ★, ♡★, ♡♡, ★♡, ★★, ♡♡♡, ♡♡★, ♡★♡, ♡★★, ★♡♡, ★♡★, ★★♡, ★★★, ♡♡♡♡, ♡♡♡★, ♡♡★♡, ♡♡★★, ♡★♡♡, ♡★♡★, ...\}$

1.3) a) Falso
b) Falso
c) Verdadeiro
d) Verdadeiro
e) Verdadeiro

1.4) a) Verdadeiro
b) Falso
c) Verdadeiro
d) Falso
e) Falso

1.5) a) $\Sigma = \{0, 1\}$

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

1.6) d

1.7) c

1.8) a

1.9) c

1.10) a

1.11) b

1.12) c