01→

$A = \{1, 3, 5, 7, 9\}$

$B = \{1, 5, 10\}$

$C = \{0, 1, 2, 4, 5, 6, 7, 8\}$

a) $1 \in A$ V

b) $1 \subset B$ F

c) $2 \supset C$ F

d) $5 \in C$ V

e) $C \in B$ F

f) $\{0, 1, 4\} \subset C$ V

02 →

$A = \{1, 2, 3, 4, 5, 6\}$

$R = \{(1,3), (3,4), (4,5), (1,4), (5,2), (1,1), (5,5), (2,6)\}$

a) NÃO – FALTA (1,2)

b) NÃO – FALTA (2,2)

c) NÃO – FALTA (3,1)

d) SIM

l) NÃO – FALTA (3,5)

03→

a)

$F = R \cup \{(2,2), (3,3), (4,4), (6,6)\}$ //

b)

$R_1 = \{(1,3), (3,4), (4,5), (1,4), (5,2), (1,1), (5,5), (2,6), (3,5), (4,2), (1,5), (5,6)\}$

$R_2 = \{(1,3), (3,4), (4,5), (1,4), (5,2), (1,1), (5,5), (2,6), (3,5), (4,2), (1,5), (5,6), (3,2), (4,6), (1,2), (3,6), (1,6)\}$

$F = \{(1,3), (3,4), (4,5), (1,4), (5,2), (1,1), (5,5), (2,6), (3,5), (4,2), (1,5), (5,6), (3,2), (4,6), (1,2), (3,6), (1,6)\}$ //

c) $\{(1,3), (3,4), (4,5), (1,4), (5,2), (1,1), (5,5), (2,6), (3,5), (4,2), (1,5), (5,6), (3,2), (4,6), (1,2), (3,6), (1,6)\} \cup \{(2,2), (3,3), (4,4), (6,6)\}$ //

04→

a)

{A}: Conjunto de símbolos variáveis

{0, 1}: Conjunto finito de símbolos terminais

P: Conjunto de produções

A: Variável inicial

b)

0	1	010
A → 0	A → 1	A → 0A0
0	1	A → 1
		010

c)

0

1

ε

palavras
palíndromes

0A0 => 0ε0 => 00

0A0 => 00A00 => 00100

0A0 => 01A10 => 01010

d)

00 OK

010 OK

00110010 NÃO

01010101 NÃO

1010 NÃO

1001 OK

1110 1111 OK