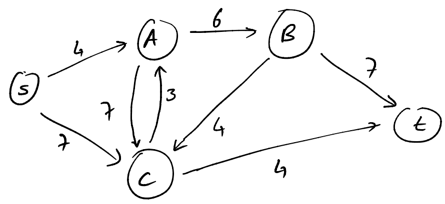
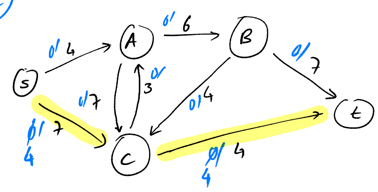
Prática 06

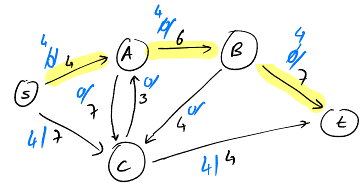
T1 08/09 III.1

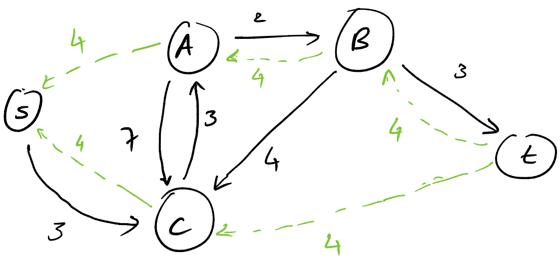


I



II

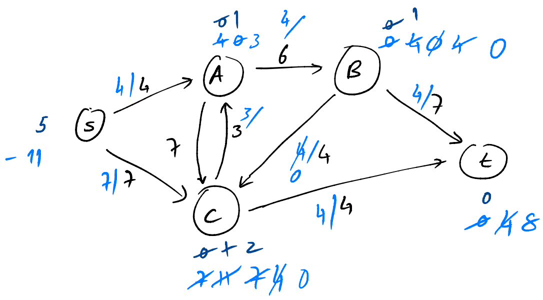




(A, C) - 7 (C, A) - 0 (C, B) - 0

(B, A) - 4 (C, s) - 4 (t, B) - 4

T1 08/09 III.3



$L = \langle A, B, C \rangle$

$N[A] = \langle s, B, C \rangle$

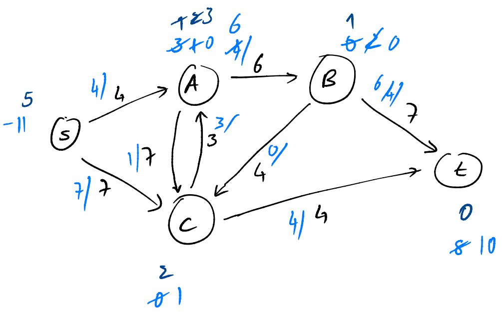
$N[B] = \langle A, C, t \rangle$

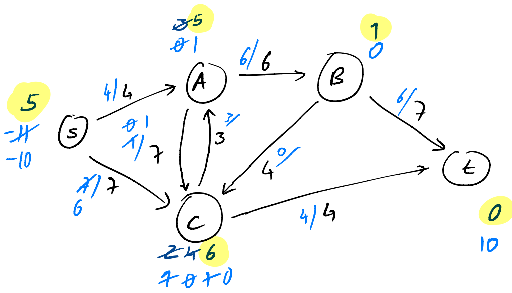
$N[C] = \langle s, A, B, t \rangle$

$L = \langle A, B, C \rangle \rightarrow \langle B, A, C \rangle \rightarrow \langle C, B, A \rangle$

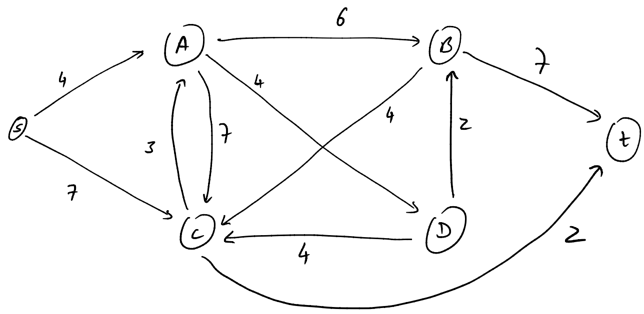
$\downarrow$

$\langle B, C, A \rangle \rightarrow \langle A, B, C \rangle$

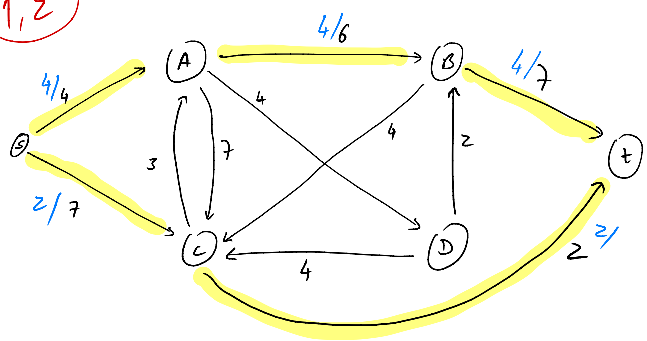




R1 08/09 III.1



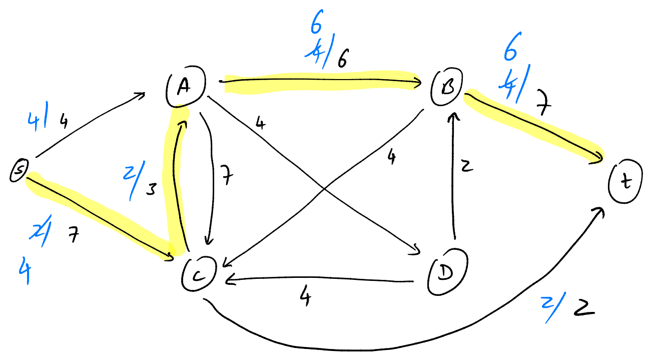
1, 2



· <s, c, t>

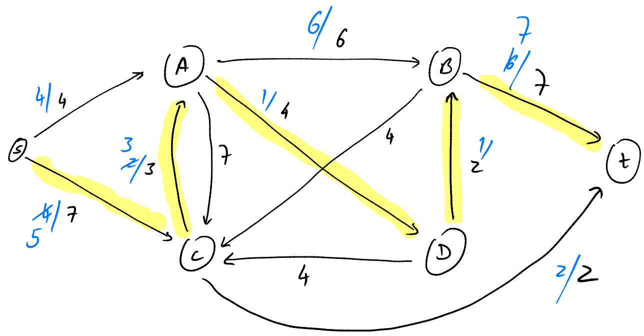
· <s, A, B, t>

3



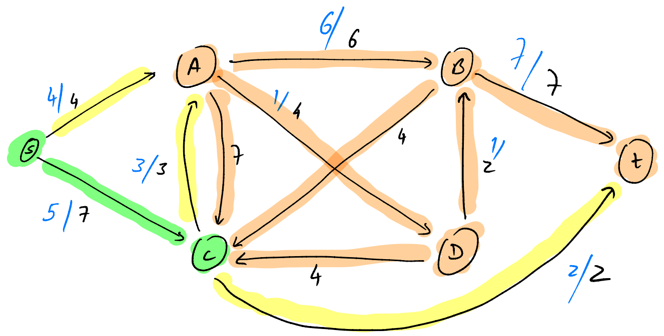
· <s, C, A, B, t>

4



· <s, C, A, D, B, t>

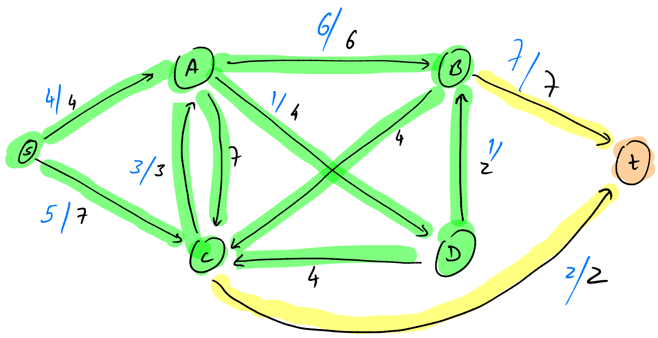
RI 08/09 III.5



Corte 1:

- $S = \{s, C\}$
- $T = \{A, B, D, t\}$

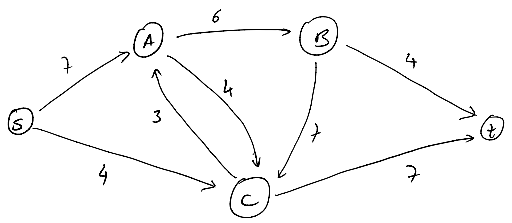
$c(S,T) = 9$



Corte 2:

- $S = \{s, A, B, C, D\}$
- $T = \{t\}$

RI 08/09 III.3

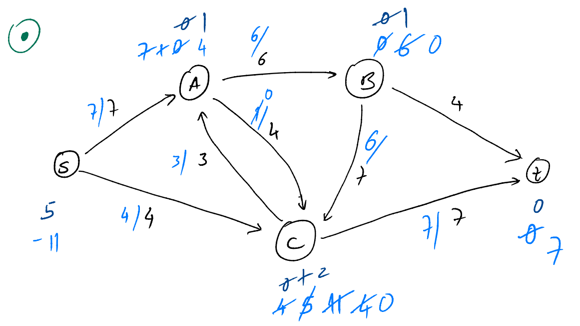


$L = \langle A, B, C \rangle$

$N[A] = \langle s, B, C \rangle$

$N[B] = \langle A, C, t \rangle$

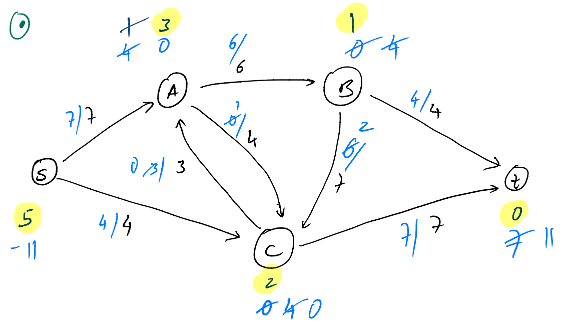
$N[C] = \langle s, A, B, t \rangle$



$\langle A, B, C \rangle \rightarrow \langle B, A, C \rangle$

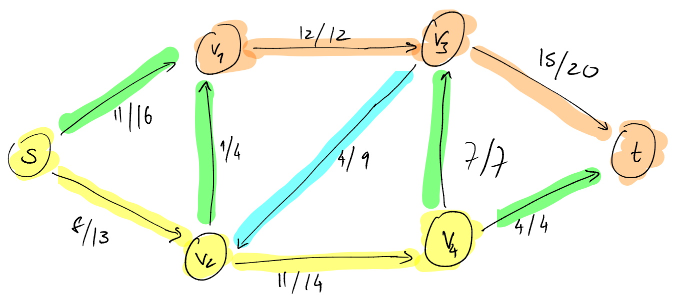
$\downarrow$

$\langle C, B, A \rangle$



$\langle C, B, A \rangle \rightarrow \langle A, C, B \rangle$

Ex 26.2-2 -



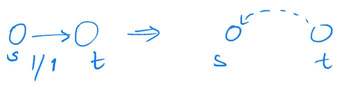
$$f(\{s, v_2, v_4\}, \{v_1, v_3, t\}) = (11 + 1 + 7 + \cancel{4}) - \cancel{4}$$
$$= 19$$
$$= \boxed{|f|}$$

TI 11/12 II.3

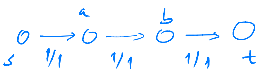
1 - V   3 - F   5 - F

2 - V   4 - F   6 - V

5 -



6 .



- $(\{s\}, \{a, b, t\})$
- $(\{s, a\}, \{b, t\})$
- $(\{s, a, b\}, \{t\})$

TI 08/09 III.2

$|f| = c(S, T)$

Ex. 26.2-8

- Se p é um caminho de aumento em G_f, então existe um caminho de aumento p' q̃ não contém arcos (v, s).

Ex 26.4-4.

- Encontrar $\hat{h}$ tal que:
  - $0 < \hat{h} < |V|$
  - $\forall v \in V.\ v.h \neq \hat{h}$
- $S = \{v \mid v.h > \hat{h}\}$
  $T = V \setminus S$

- $u \in S,\ v \in T,\ (u, v) \in E_f$

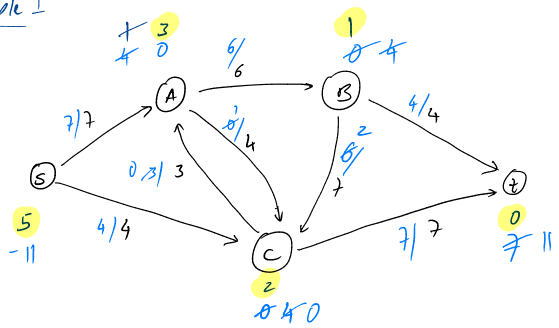
  $u.h \leq v.h + 1$ (Invariante das alturas)

  $\underbrace{u.h > \hat{h} > v.h}$

  $u.h > v.h + 1$ ⊥ ∴ =

→ Este $\hat{h}$ existe porque existem $|V| - 1$ nºs entre 0 e $|V|$ e $|V| - 2$ vértices.

Example I

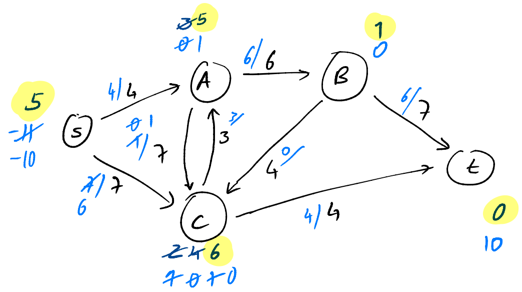


$h = 4$

$S = \{s\}$

$T = \{A, B, C, t\}$

Example II



$h = 2$

$S = \{s, A, C\}$

$T = \{B, t\}$