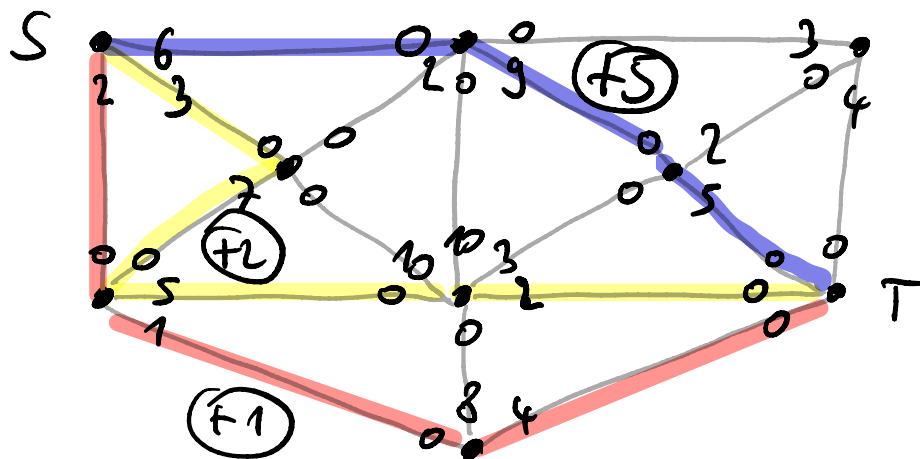
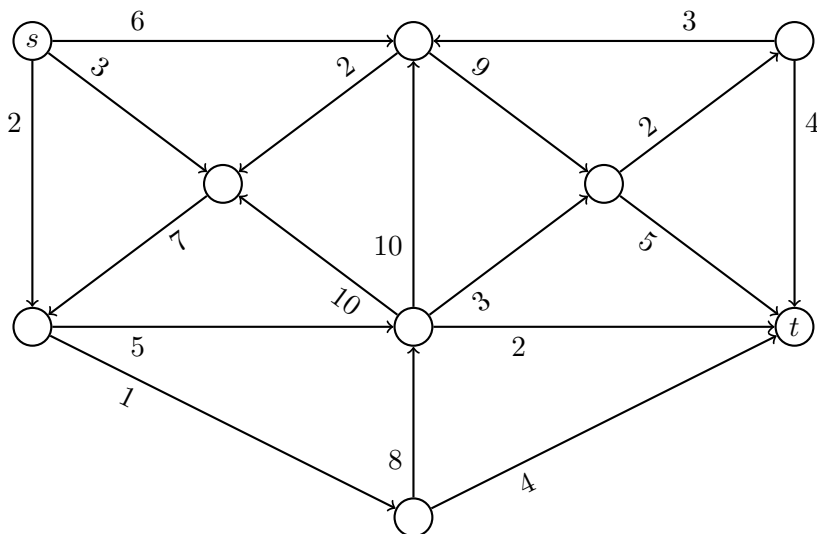
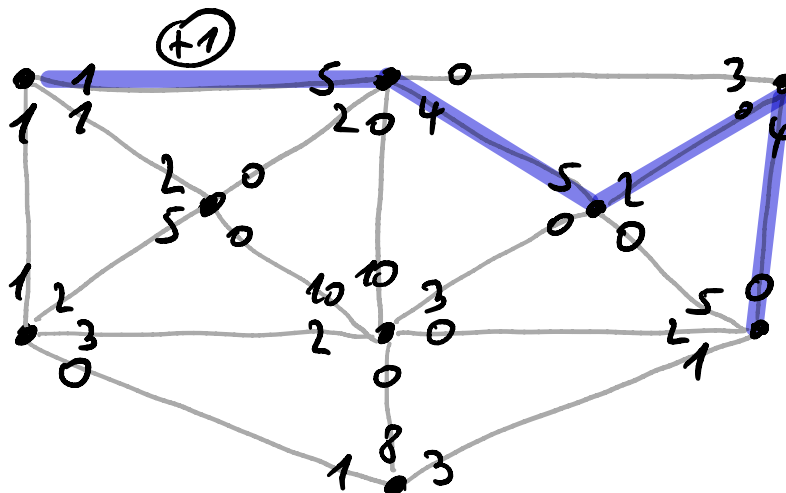


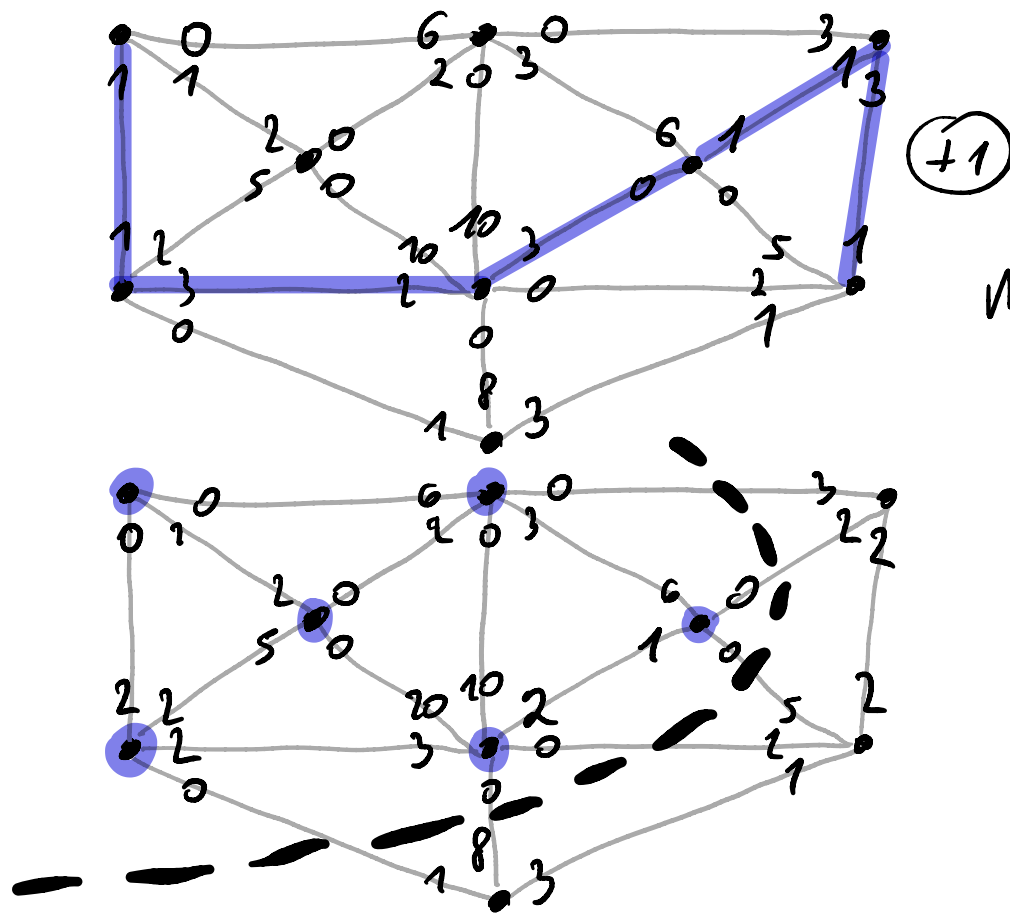
1. Poišči maksimalni pretok in minimalni prerez na sledečem grafu.



Kona vrednost = 8



Kona vrednost = 9



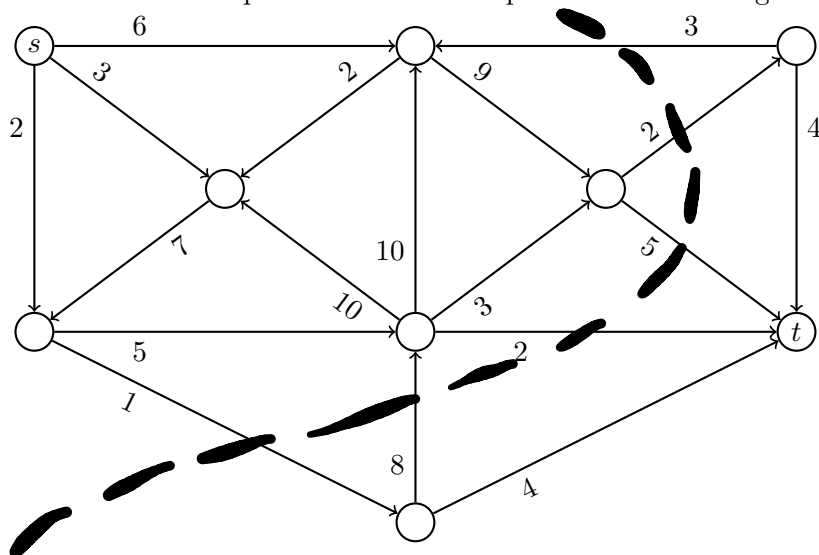
Wora verlust
= 10

Komc

Makes. putok = 10

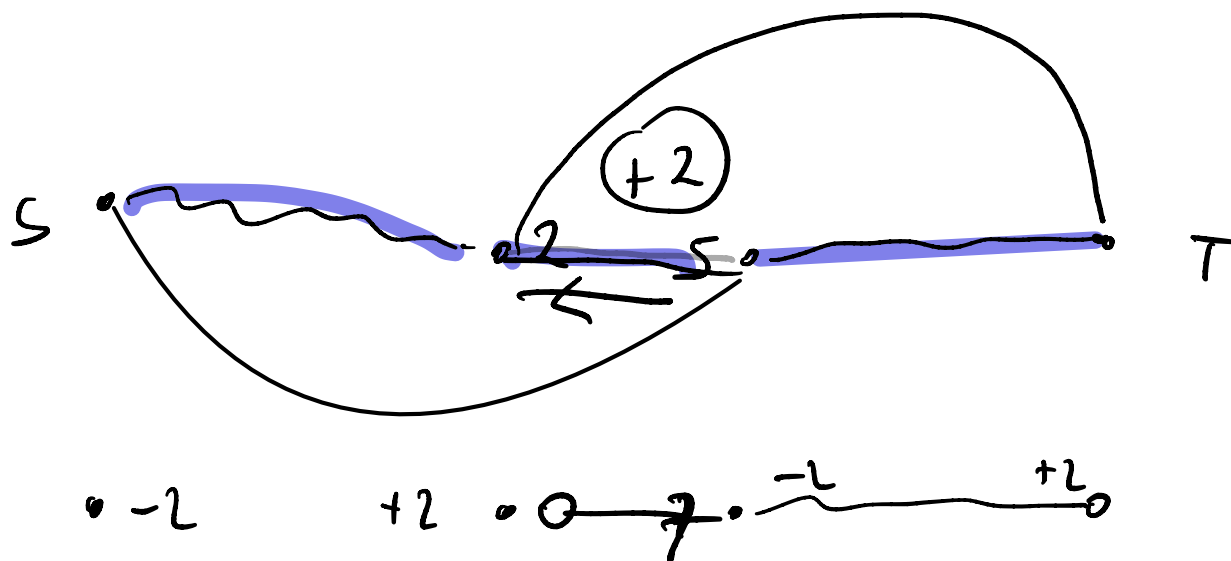
Pin. putok = 10

1. Poišči maksimalni pretok in minimalni prerez na sledečem grafu.

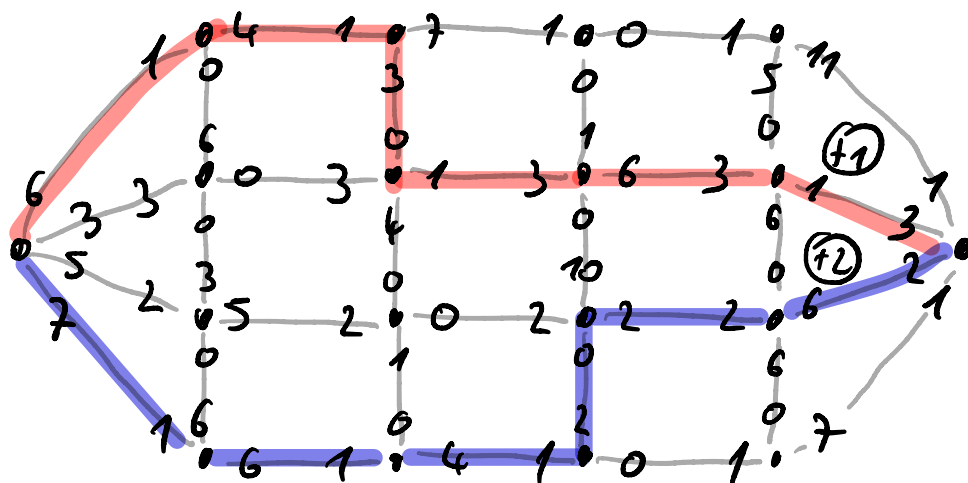
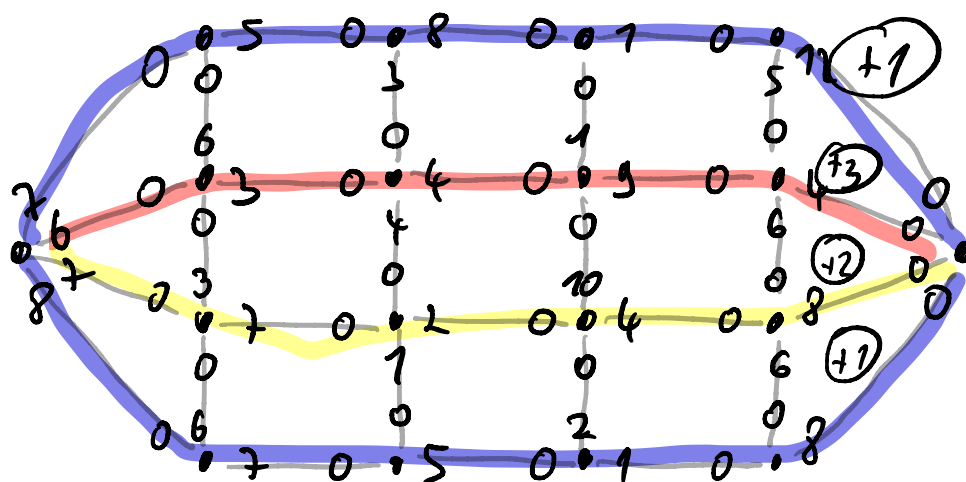
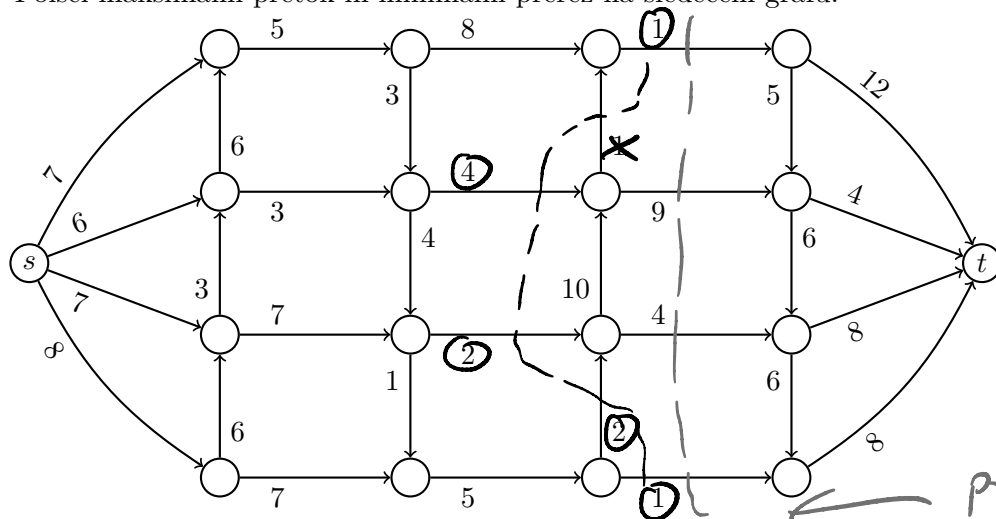


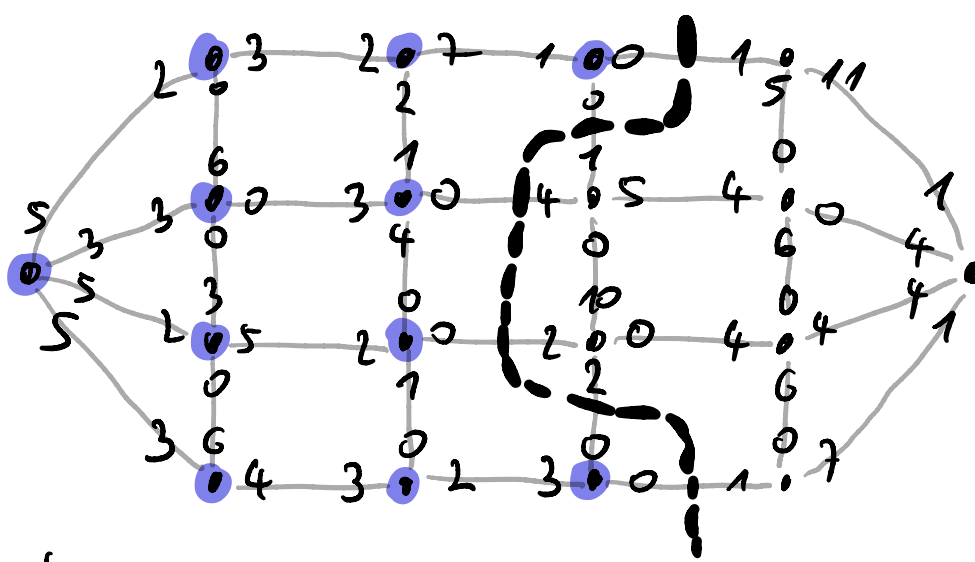
$$\text{Prerez} = 0 + 2 + 5 + 2 + 0 + 1 = \underline{\underline{10}}$$

Sklepi:



2. Poišči maksimalni pretok in minimalni prerez na sledečem grafu.

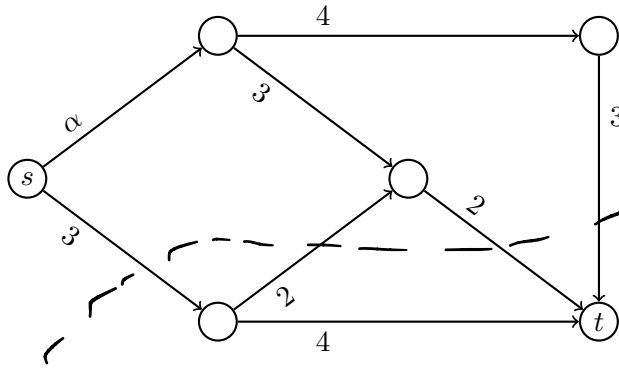




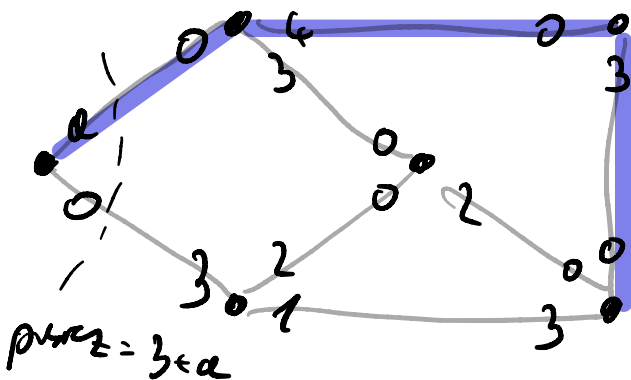
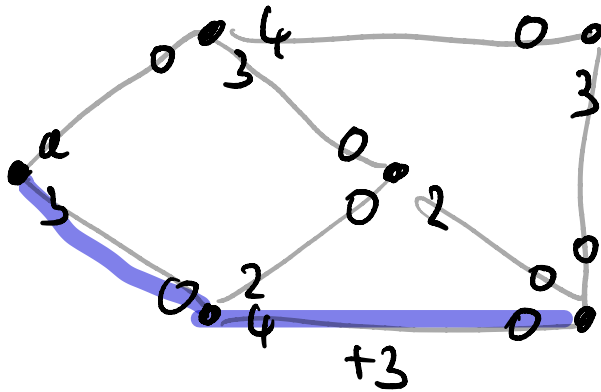
Konec, 10 je max. počet.

$$P_{\text{max}} = 1 + 4 + 2 + 2 + 1 = \underline{\underline{10}}, \text{ min } p_{\text{max}}.$$

3. Poišči maksimalni pretok in minimalni prerez na sledečem grafu v odvisnosti od parametra a .

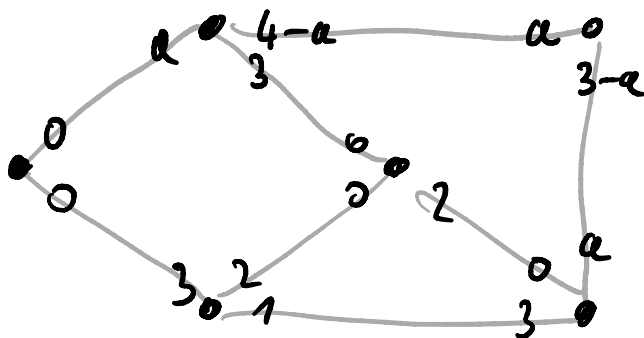


- $pretok = 3 + 2 + 0 + 3 = \underline{\underline{8}}$

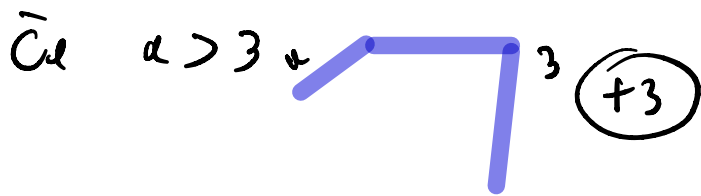


Vrednost pretoka $= \underline{\underline{3}}$
 če $a=0$; to je optimalno.
 $pretok = 3$

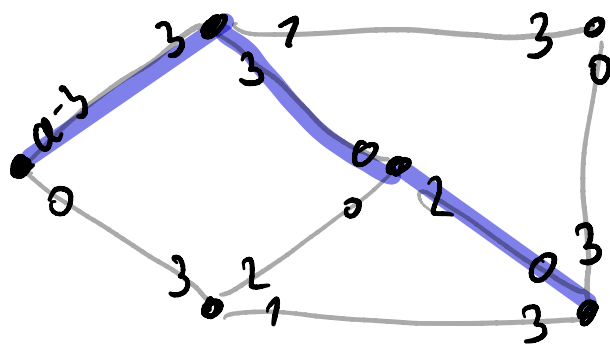
Če $a > 0$: $+ a$, če je $a \leq 3$



Pretok $= 3 + a$
 Prerez $= 3 + a$
 Opt. rešitev!! ($0 < a < 3$)



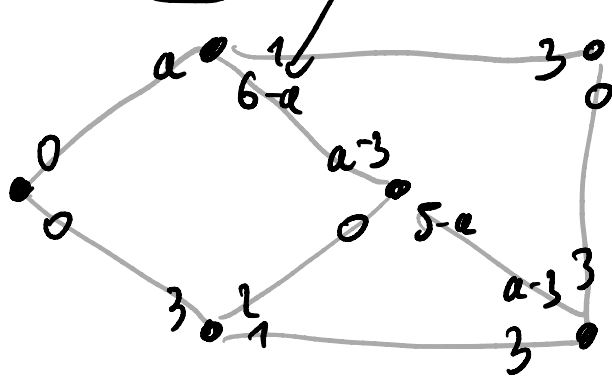
Prubk $3+3=\underline{6}$



$+ \min(a-3, \cancel{1}, 2)$

$\uparrow$
 ločim $a \leq 5$
 $a > 5$

$3 < a \leq 5$: $+(a-3)$ $3-(a-3)$

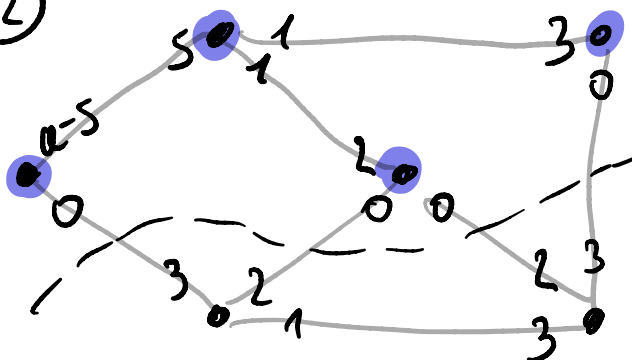


Prubk $= 6 + a - 3 = 3 + a$

Preraz $= 3 + a$ (ok prij)

$\Rightarrow$ Opt.

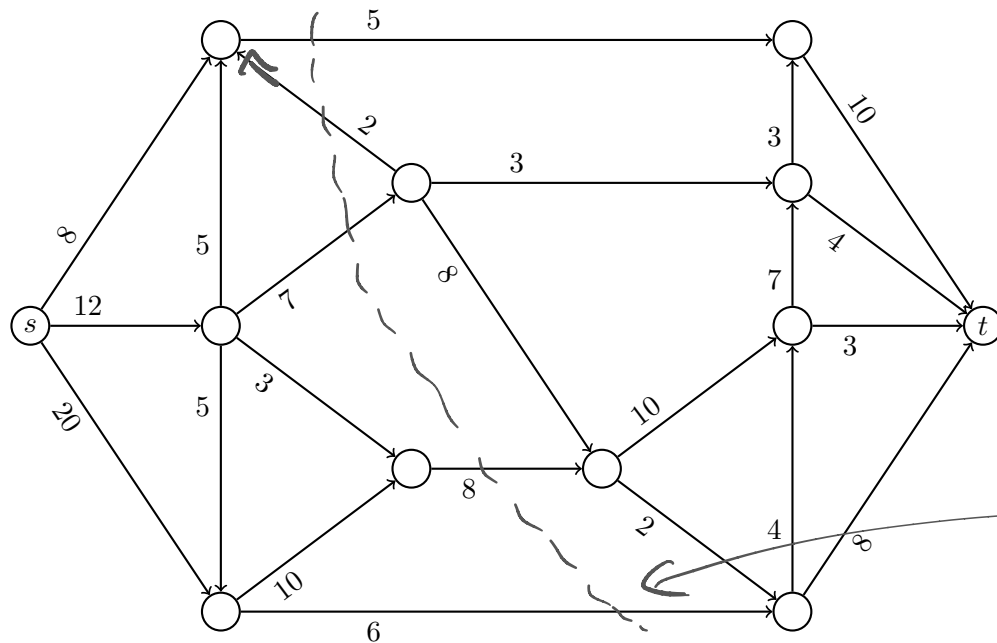
$\bar{C}_e \quad a > 5$: $(+2)$



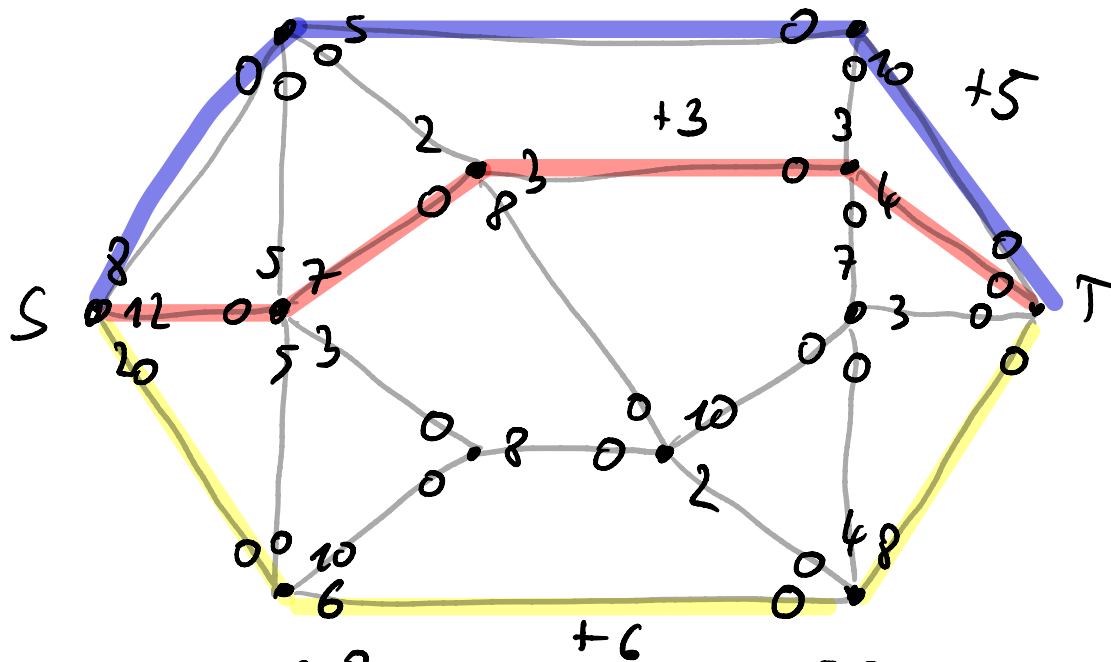
Prubk $= 6 + 2 = 8$

Preraz $= 8$ (na trčetku)

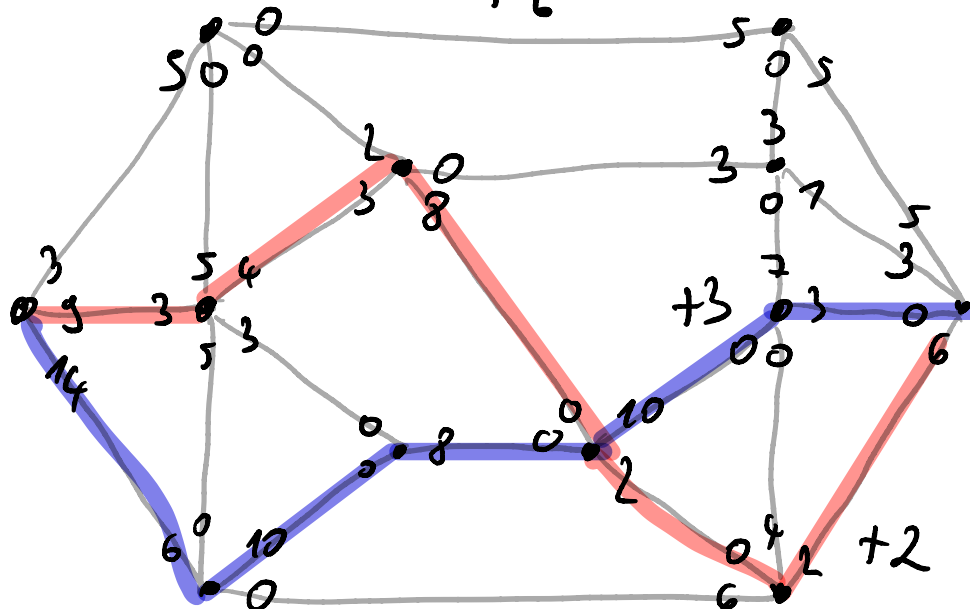
4. V sledečem grafu lahko kapaciteto ene povezave povečamo za 1. Katera naj bo ta povezava, da bomo povečali maksimalni pretok?



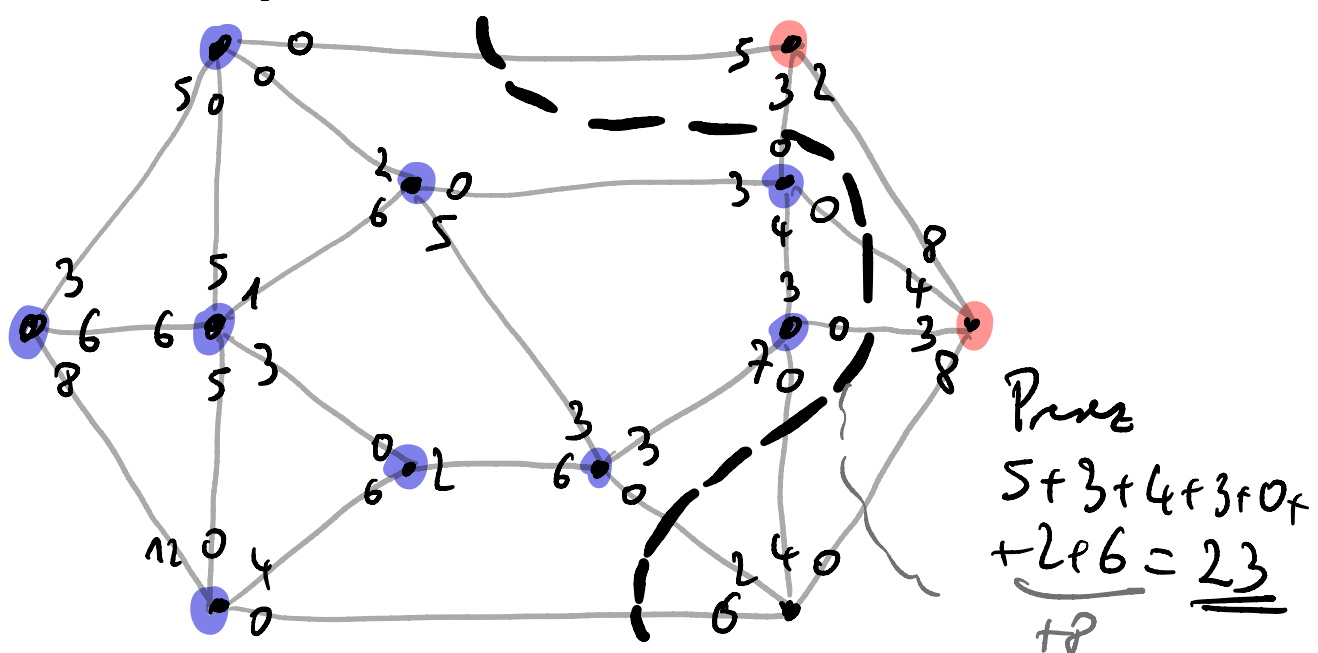
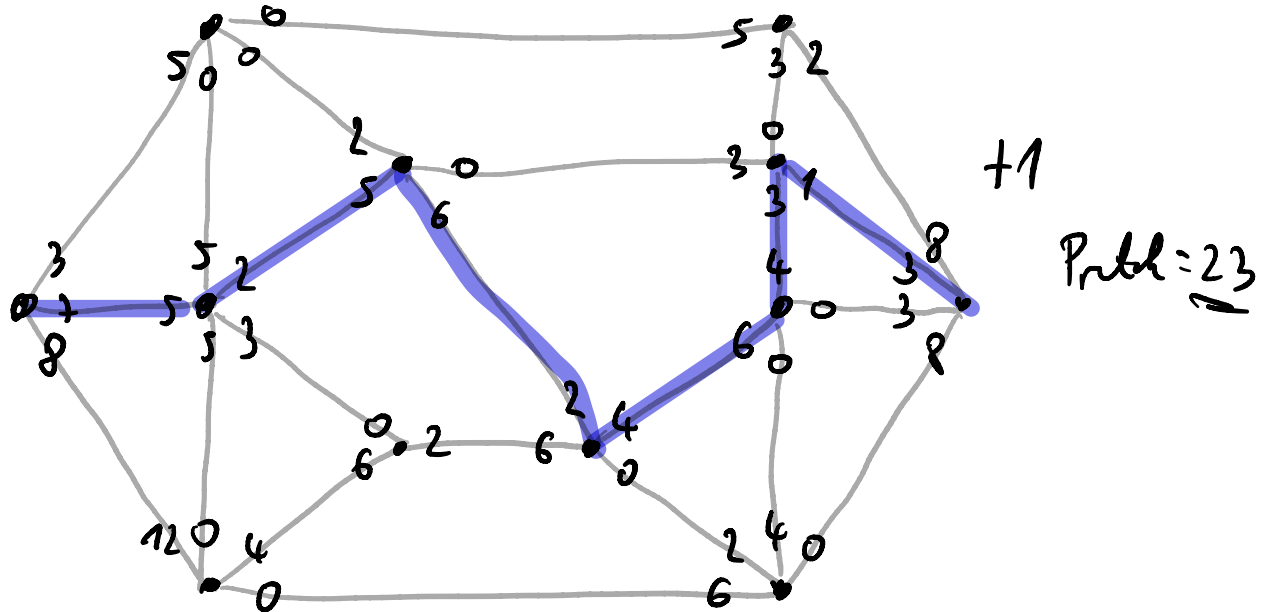
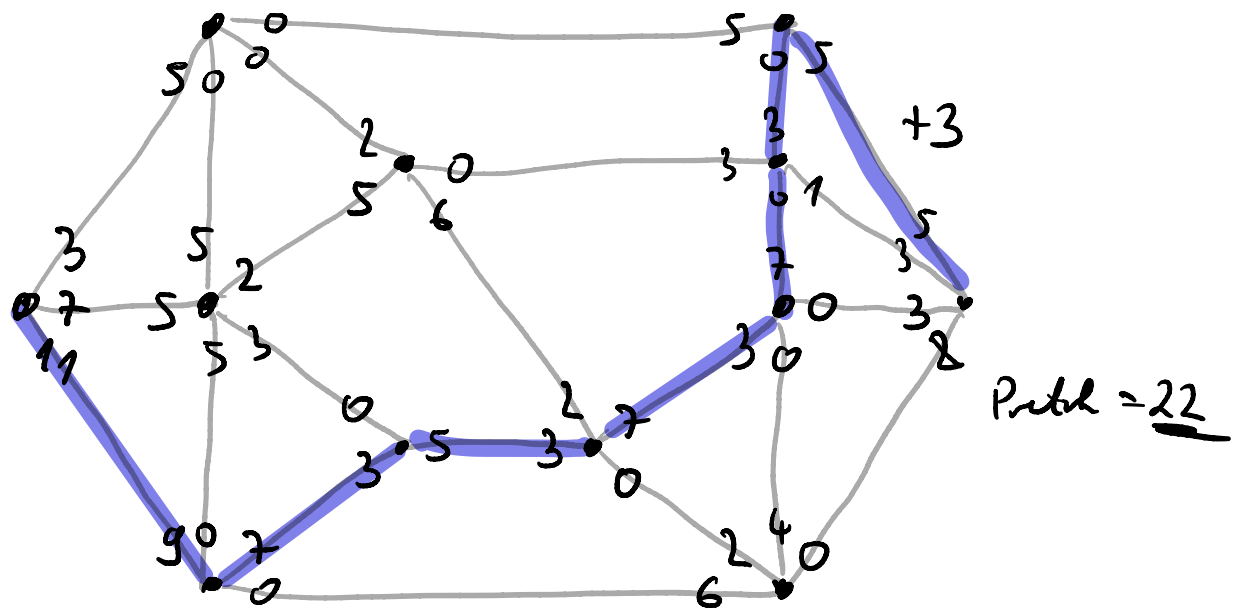
prej 26



Pretok = 14



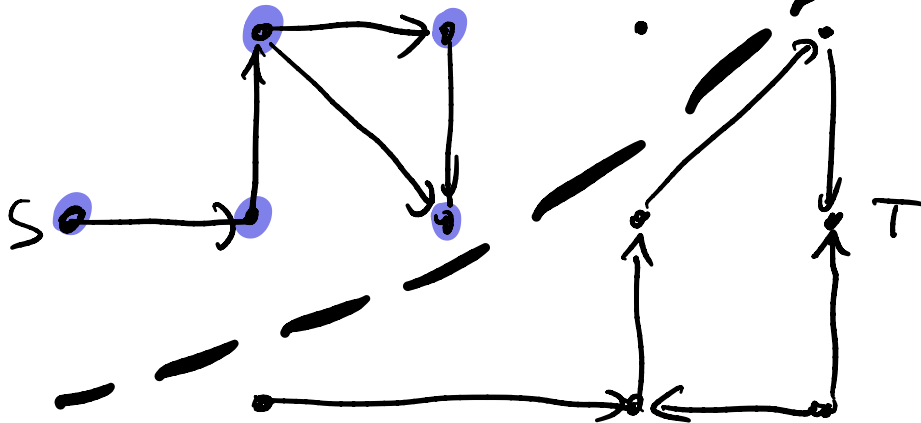
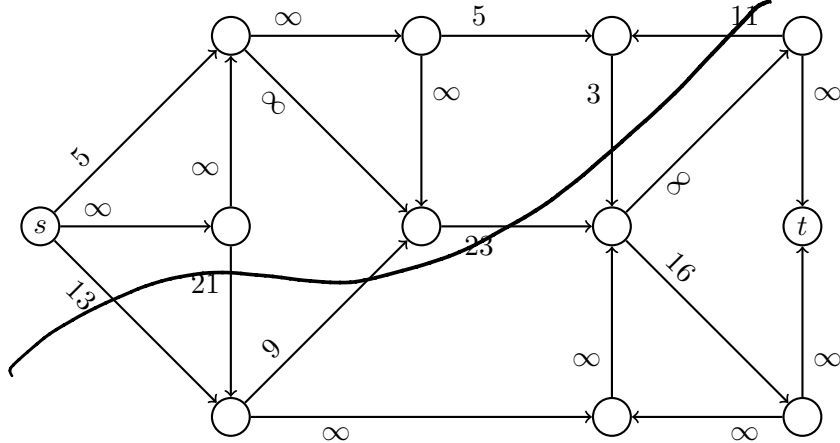
Pretok = 19



Izistija prečna

(+1)
 ⇒ prubh povečal za 1.

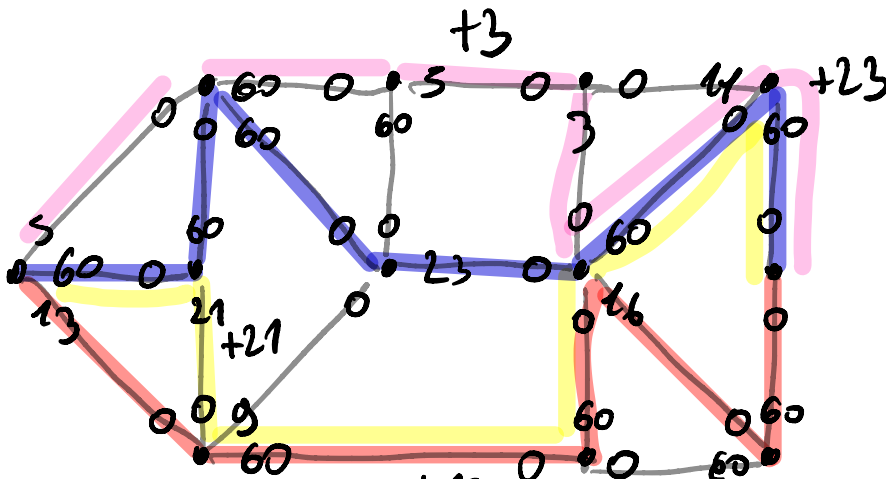
5. Poišči maksimalen pretok v sledečem grafu, če ta obstaja!



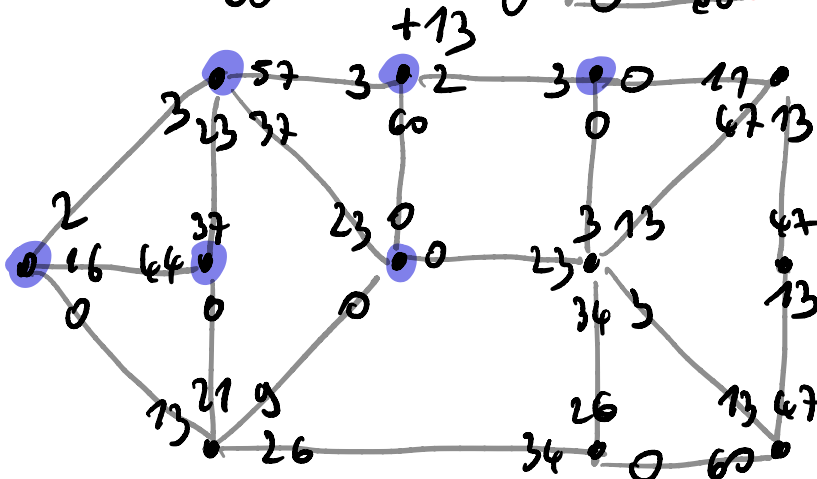
Prijem končen
pretoka.

$$P_n = 13 + 21 + 23 + 3 = 60$$

$\infty \rightarrow \underline{60}$



Pretok 60



Opt. rešitev !!