

efbriS frbuw!Gpx !Ejtusjc vujpo!po!Ejsfdufe!Ofux psl !!

Bc tus bdu

**2! OUS PE DU PO!
!**

-
-
-
-
-

3!S FMBUFE!X PSLT

$$\mathbf{U} = \left[\begin{array}{c} + \\ = \\ | \\ = \end{array} \right] > \neq$$

$$\mathbf{U} = \Delta^{-1} \mathbf{B}$$

Δ

\mathbf{B}

π

$$\pi \mathbf{T} = \pi \lambda =$$

$$\pi = \frac{\quad}{\quad}$$

$$\mathbf{U} = \left\{ \begin{array}{l} \text{---} \end{array} \right\} \rightarrow$$

U

π

U

$$\frac{\pi}{\pi} \leq (\quad)$$

!

4! EFBMGMP X!

!

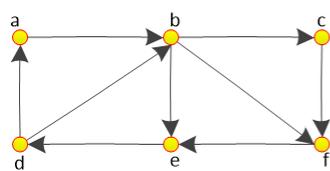
4 2!CbtjdBttvn uipo!

4 3! e f bit Gpx !E f gjo juipo!

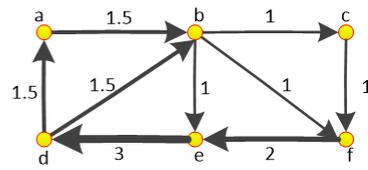
= ()

$$G = \begin{bmatrix} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \end{bmatrix}$$

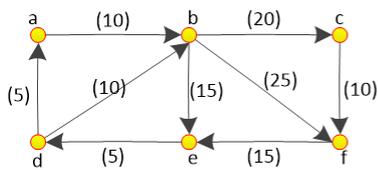
Efgj jujpo! 2 jef bndgpx



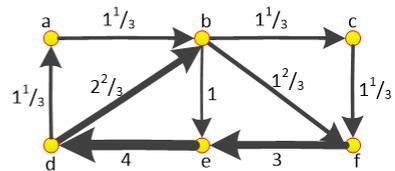
(a)



(b)

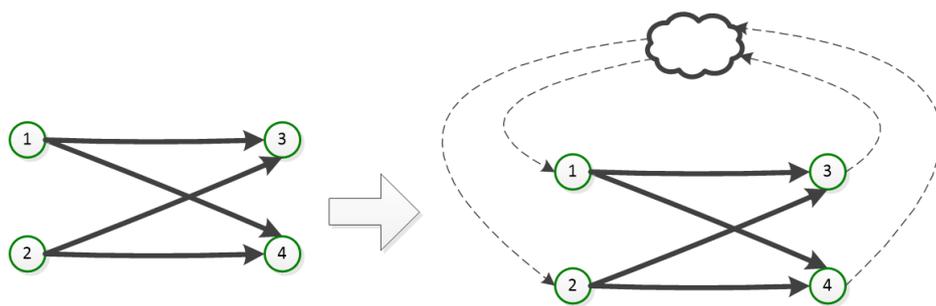


(c)



(d)

4 4! e f bitGpx !N pe frjoh!



4 5!N vmj. Bhf od Tjn vrbujpo!
!

S

• U

Brhps jü n

$$\mathbf{B} = (\mathbf{B} - \mathbf{B}) >$$

$$\mathbf{w} = \sum \mathbf{B}$$

$$\Delta = (\mathbf{w})$$

$$\mathbf{U} = \Delta^{-1} \mathbf{B}$$

Fssps!S fgfsodf!tpvsdf!opulgpvoe

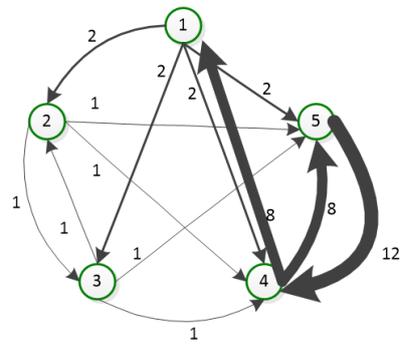
!

Ovn fsjdbitF bn rfi. 2

$$\mathbf{B} = \begin{bmatrix} & \\ & \end{bmatrix}$$

$$\mathbf{S} = \begin{bmatrix} & \\ & \end{bmatrix} \quad \mathbf{S}_{=\infty} = \begin{bmatrix} \infty & \infty & \infty & \infty \\ & \infty & \infty & \infty \\ \infty & & \infty & \infty \\ & & & \infty \end{bmatrix}$$

$G = \begin{bmatrix} & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \end{bmatrix}$



4 6!N bovbitDpn vubujpo!pg Tuboe bse! e f bitGpx!

<p>Brhps jui n .3 !N bovbitDpn vubujpo!pg Tuboe bse! e f bitGpx! o vu P vu vu</p>

4 6!Mjofbs!Brhfc sb!Dpn vubujpo!pg e f bitGpx!

C

f

C

$$\mathbf{Cf} = \mathbf{1}$$

f

f

D

$$\mathbf{E} = \begin{bmatrix} \mathbf{C} \\ \dots \\ \mathbf{D} \end{bmatrix}$$

$$\mathbf{Ef} = \mathbf{1}$$

f

E

$$\mathbf{f} = (\mathbf{E})$$

f

Fssps!S fgfsodf!tpvsdf!opulgpvoe

Fssps!S fgfsodf!tpvsdf!opulgpvoe

C

D

C

D

D

B

C⁺

C⁻

$$\mathbf{C}^+ + \mathbf{C}^- = \mathbf{C}$$

o

$$\mathbf{C}^+ \mathbf{f} = \mathbf{o}$$

$$\mathbf{C}^- \mathbf{f} = -\mathbf{o}$$

gpvoe

f
Fssps!S fgfsodf!tpvsdf!opulgpvoe
Fssps!S fgfsodf!tpvsdf!opul

f

$$g = \frac{f}{f}$$

Brhps jui n .4 !Mjof bs!Brhfc sb!dpm vubujpo!pg/Tubo e bse! e f bntGpx!
o vu
P vu vu

D

C⁺

$$E = \begin{bmatrix} C \\ \dots \\ D \end{bmatrix}$$

f

Ef = 1

$$g = \frac{f}{f}$$

C
C⁺

!
5! SP FSU FTPG EFBMGMP X!

Ui fpsfn !3

$$G \equiv \kappa G$$

N

$$\mathbf{t} = \mathbf{B} \mathbf{k}$$

$$\mathbf{t} = \mathbf{k} \mathbf{B}$$

$$\mathbf{t} = \mathbf{B} \mathbf{k}$$

- $\mathbf{t} = \mathbf{t}$
- $\mathbf{t} = \mathbf{t}$

Ui fpsfn .4

$$\sum \sum = \sum = \pi$$

!
Ui fpsfn .5

U

$$\pi = \begin{bmatrix} \mathbf{U} & - \\ \mathbf{k} & \end{bmatrix} \begin{bmatrix} \\ \mathbf{k} \end{bmatrix}$$

$$\mathbf{G} = \pi \mathbf{j} \circ$$

!
!
6!N BY N N!FOUS P !

!

 Ui fpsfn .6

$$= [\dots]$$

$$= -\sum_{\underline{=}}$$

$$= -\sum_{\underline{=}}$$

$$\sum_{\underline{=}} =$$

$$(\) = +\lambda (\)$$

$$= -\sum_{\underline{=}} + \lambda \left(\sum_{\underline{=}} - \right)$$

$$\frac{\partial (\)}{\partial} = - \dots (+ (\)) + \lambda =$$

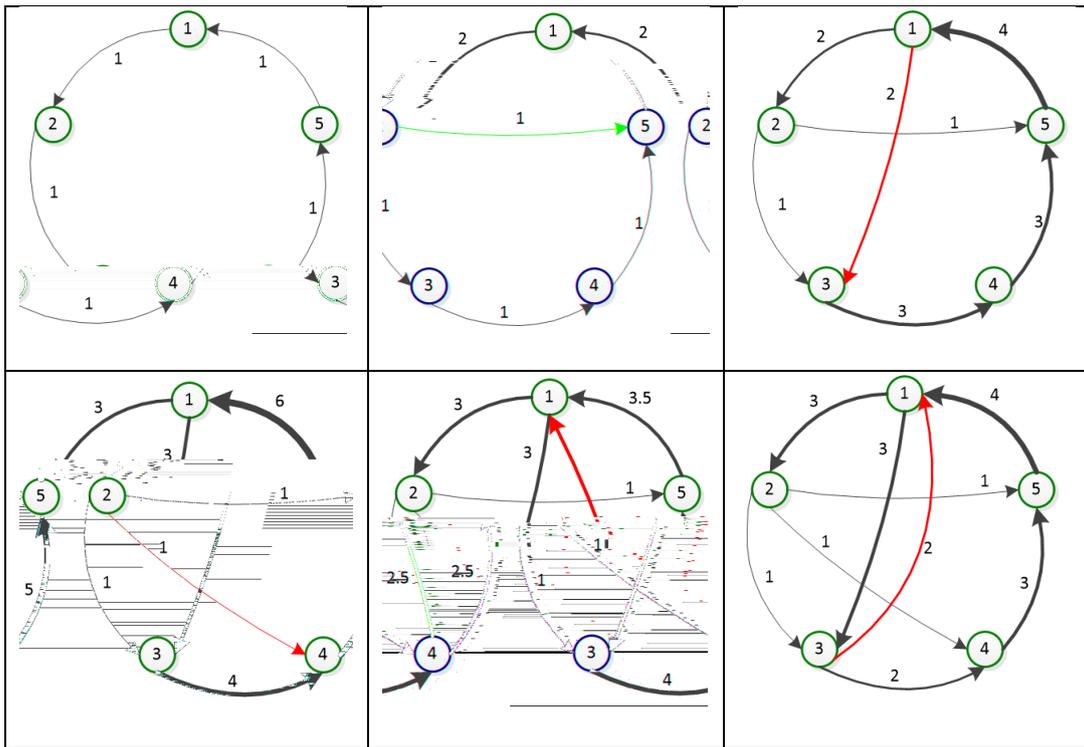
$$= \lambda - =$$

$$\sum_{\underline{=}} =$$

$$= - \dots = \dots$$

Fssps!S fgfsfodf!tpvsdf!opulgvoe

7! B MDBU POT! PG EFBM GMPX! UP! E OBN D! USBOT PSUBU PO!
 OFUX PSL!

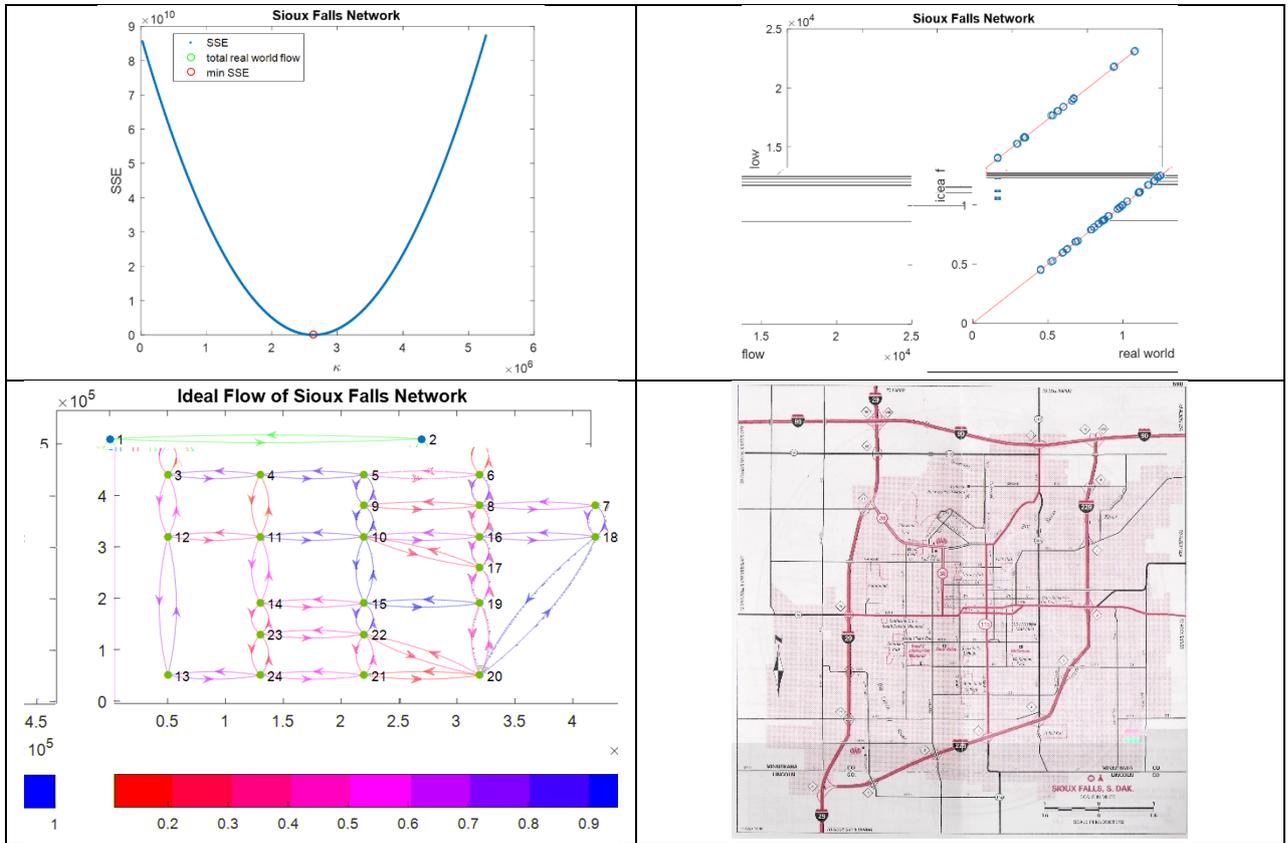


**8!EFN POTUS BU PO!PG EFBMGMPX!UP!T P Y!GBMMI!US BOT PSUBU PO!
OFUX PSL!**

U

κ

$\kappa =$



**!DPQDM T POT!BOE!S FDP N N FOEBU POT!
!**

MTU!PGOP UBU POT!

B

C

C⁻

C⁺

D

E

f

g

G

k

N

o

S

t

t

U

Δ

λ

κ

π

π

S FGFS FODFI!

