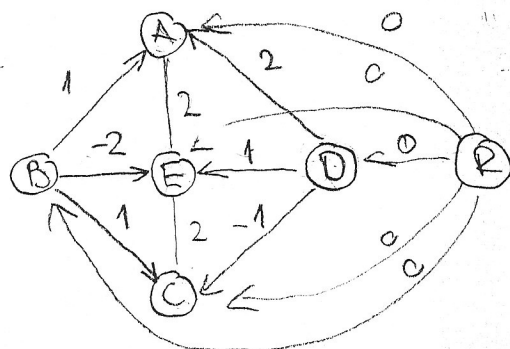


# GRAFOVI - DIJKSTRIN ALGORITAM

21. 2010/11. (4)

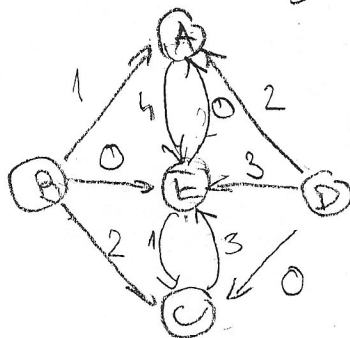


## 1) BELLMAN - FORD

	1	2
B	0	0
A	$\infty$	0
B	$\infty$	0
C	$\infty$	0
D	$\infty$	0
E	$\infty$	0

$$\begin{aligned} d(A) &= 0 \\ d(B) &= 0 \\ d(C) &= -1 \\ d(D) &= 0 \\ d(E) &= -2 \end{aligned}$$

## 2) TRANSFORMACIJA



## 3) DIJKSTRA

ITERACIJA	0	1	2	3	4
VRH	/	B	E	A	C
A	$\infty$	1	0 //		
B	0 //				
C	$\infty$	2	1	1 //	
D	$\infty$	$\infty$	$\infty$	$\infty$	$\infty //$
E	$\infty$	0 //			

## 4) CEBENUTA TRANSFORMACIJA

$$L(B, A) = 1 + 0 - 0 = 1$$

$$L(B, C) = 2 + (-1) - 0 = 1$$

$$L(B, D) = \infty + 0 - 0 = \infty$$

$$L(B, E) = 0 + (-2) - 0 = -2$$

$$L(A, B) = L'(A, B) + d(B) - d(A)$$

$$w(B, A) = 1 + 0 - 0 = 1$$

$$w(B, E) = -2 + 0 - (-2) = 0$$

$$w(B, C) = 1 + 0 - (-1) = 2$$

$$w(A, E) = 2 + 0 - (-2) = 4$$

$$w(E, A) = 2 + (-2) - 0 = 0$$

$$w(C, E) = 2 + (-1) - (-2) = 3$$

$$w(E, C) = 2 + (-2) - (-1) = 1$$

$$w(D, A) = 2 + 0 - 0 = 2$$

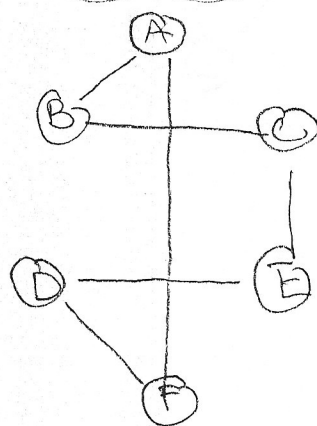
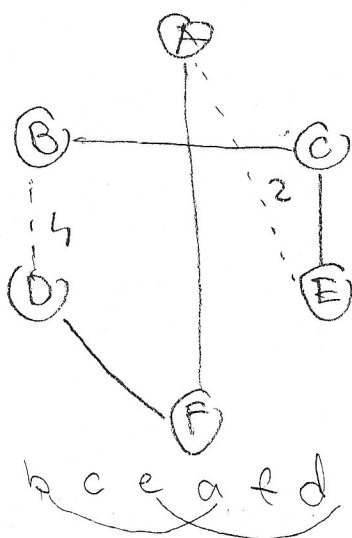
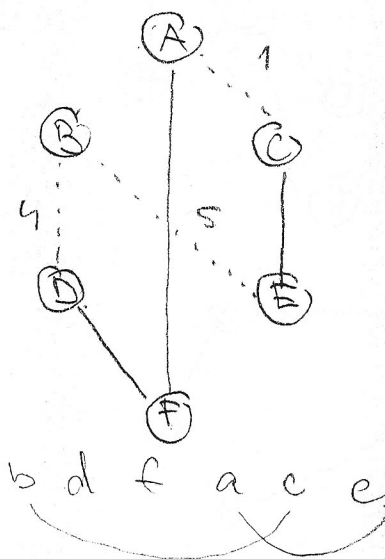
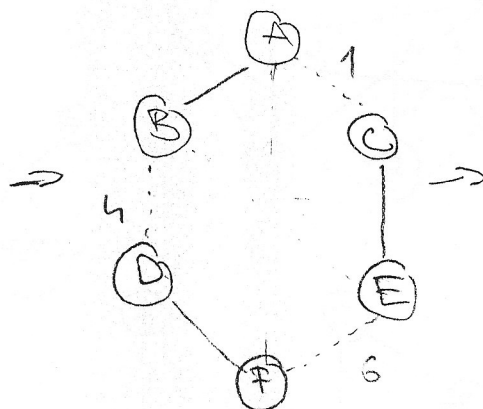
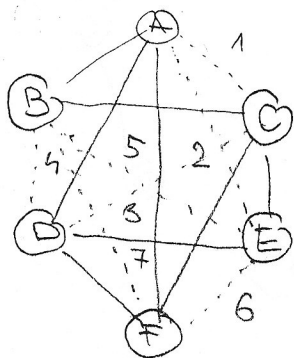
$$w(D, E) = 1 + 0 - (-2) = 3$$

$$w(D, C) = -1 + 0 - (-0) = 0$$

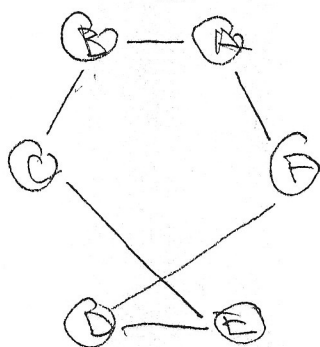
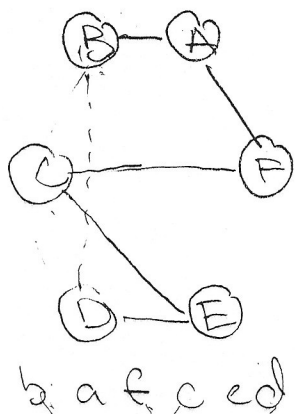
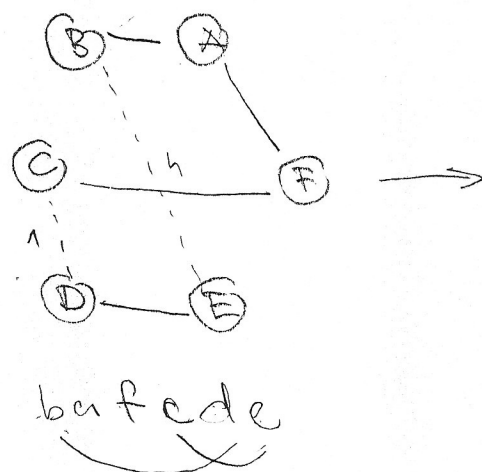
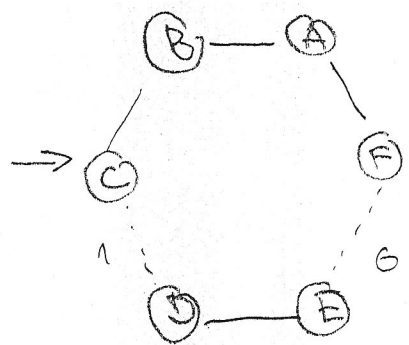
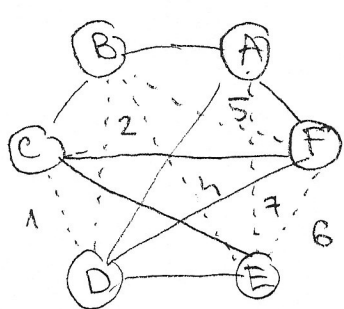
$$w'(A, B) = w(A, B) + d(A) - d(B)$$

# GRAFOVI - BONDY-CHVATALOV TEOREM

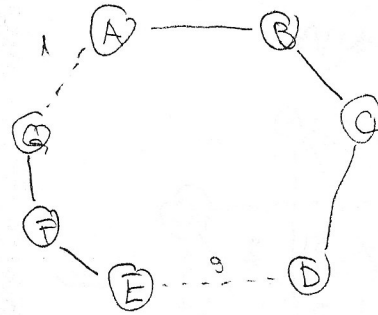
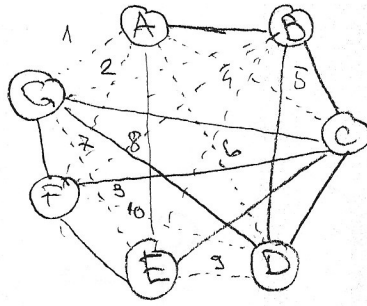
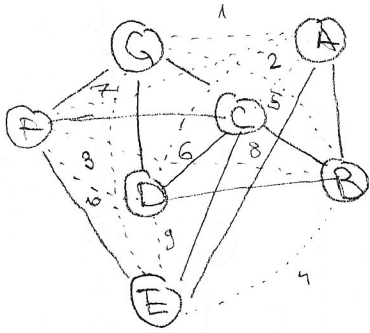
## PREDAVANJA



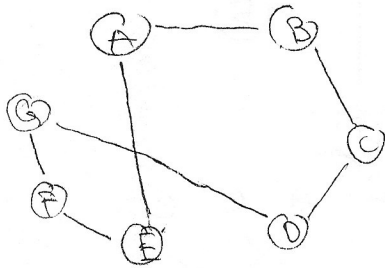
21. 2010/11. (5)



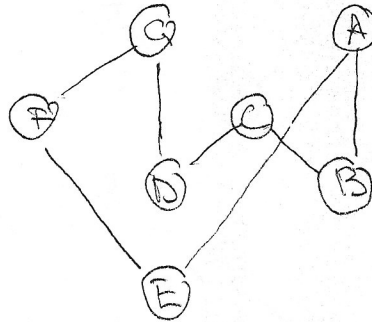
22 2012/13. (5)



DCBA GFE



$\Rightarrow$



✓

# NASP KNAPSACK

21 2010/11. (7) 12 dana

Predmet	A	B	C	D	E
ECTS	5	6	3	4	7
Vrijeme	4	6	2	5	7

Predmet	A	B	C	D	E
1	0	0	0	0	0
2	0	0	→3	→3	→3
3	0	0	3	3	3
4	→5	→5	→5	→5	→5
5	5	5	5	5	5
6	5	→6	→8	→8	→8
7	5	8	8	8	8
8	5	6	→9	→9	9
9	5	6	9	9	→10
10	5	→11	9	9	10
11	5	11	9	→12	→12
12	5	11	→14	→14	12

A, B i C

MAX ECTS → 11

vrijeme 12 //

21 2009/10. (5) 12 m

investicija	sted	stun sted	obv	dian	mek
1	0	0	0	0	0
2	0	→3	3	3	3
3	0	3	3	→10	10
4	0	3	→7	10	10
5	0	3	7	13	13
6	→7	→7	10	13	13
7	7	7	10	17	17
8	7	→10	10	17	→18
9	7	10	10	20	→20
10	7	10	14	20	21
11	7	10	14	20	28
12	7	10	17	20	28 //

	1	2	3	4	5
zarada	7	3	7	10	18
ulaganje	6	2	4	3	8

28

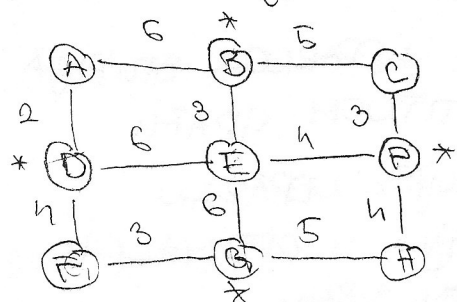
dianice i rekreacije

11 mil

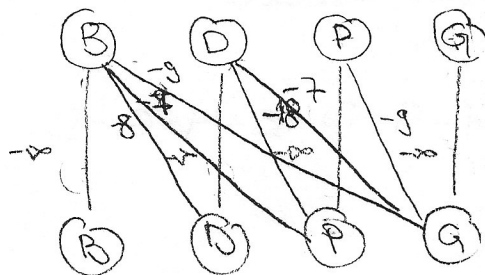
# NASP - GRAFOVI - PROBLEM KINESKOG POŠTABA

21. 2010./11. (8)

- a)
- 1) NAĆI NAJKRAĆE PUTEVE MEĐU VRHOLIMA NEPARNOG STUPNJA
  - 2) KONSTRUIRATI POTPUNI BIPARTITNI GRAF S ISTIM VRHOLIMA NA OBE STRANE
  - 3) NAĆI OPTIMALNU PRIDRUŽENOST U BIPARTITNOM GRAFU
  - 4) ZA SVAKI BRID ŽELI JE POČETNI VRH NEPARNOG STUPNJA PROŠIRITI GRAF SVIM BRIDOVIMA IZ ODD PATHS
  - 5) FLEURYJEVIM ALGORITMOM ODREDITI EULEROV CIKLUS

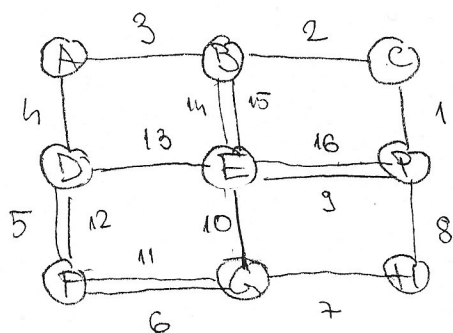


	B	D	F	G
B	0	8	7	9
D		0	10	7
F			0	9
G				0



BP - 7

DG - 7



EULERIZACIJA