Centers and medians. Variant 1.

1. Find for a graph with the following incidence matrix where $C(e)$ – is the weight of an edge e:

– a center;

– a general center;

– an absolute center;

– a median;

– a general median;

– an absolute general median.

	α	β	γ	δ	ε	λ
a		1	-1	1		
b	1	1			-1	-1
c				-1	1	
d	1		1			1
$C(e)$	4	1	6	7	3	2

2. Find an absolute p-center of the minimal MSV distance with the cardinal number 3.

3. Find a p-median of the minimal cardinal number with $\Delta = 0.6\text{TVV}(j)$, where j is a median vertex.

Centers and medians. Variant 2.

1. Find for a graph with the following incidence matrix where $C(e)$ – is the weight of an edge e:

– a center;

– a general center;

– an absolute center;

– a median;

– a general median;

– an absolute general median.

	α	β	γ	δ	ε	λ
a		1	1	-1		
b	1	1			-1	-1
c				1	1	
d	1		-1			1
$C(e)$	7	1	3	2	4	5

2. Find an absolute p-center of the minimal MSV distance with the cardinal number 3.

3. Find a p-median of the minimal cardinal number with $\Delta = 0.6\text{TVV}(j)$, where j is a median vertex.

Centers and medians. Variant 3.

1. Find for a graph with the following incidence matrix where $C(e)$ – is the weight of an edge e:

– a center;

– a general center;

– an absolute center;

– a median;

– a general median;

– an absolute general median.

	α	β	γ	δ	ε	λ
a		1	-1	1		
b	1	1			-1	1
c				-1	1	
d	1		1			-1
$C(e)$	4	3	4	1	6	7

2. Find an absolute p-center of the minimal MSV distance with the cardinal number 3.

3. Find a p-median of the minimal cardinal number with $\Delta = 0.6\mathrm{TVV}(j)$, where j is a median vertex.

Centers and medians. Variant 4.

1. Find for a graph with the following incidence matrix where $C(e)$ – is the weight of an edge e:

– a center;

– a general center;

– an absolute center;

– a median;

– a general median;

– an absolute general median.

	α	β	γ	δ	ε	λ
a	1	1	-1	1		
b	1				-1	-1
c				-1	1	
d		1	1			1
$C(e)$	3	5	1	8	3	4

2. Find an absolute p-center of the minimal MSV distance with the cardinal number 3.

3. Find a p-median of the minimal cardinal number with $\Delta = 0.6\mathrm{TVV}(j)$, where j is a median vertex.