S.P. Burkova, G.F. Vinokurova, R.G. Dolotova
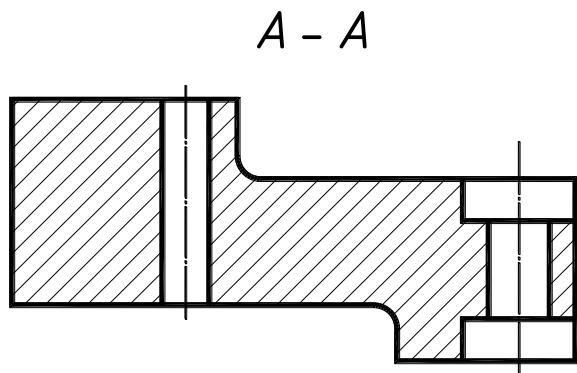
DESCRIPTIVE GEOMETRY AND ENGINEERING GRAPHICS

Bank of supervising materials of entrance, examination and total control
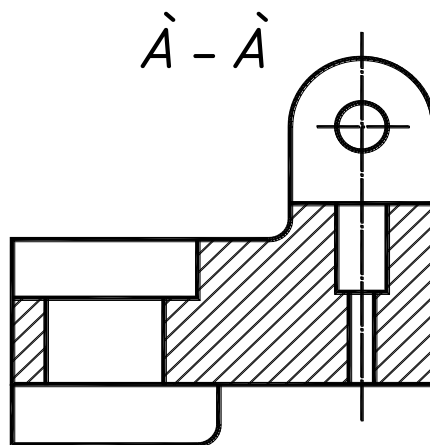
Task of entrance control

Variant №1
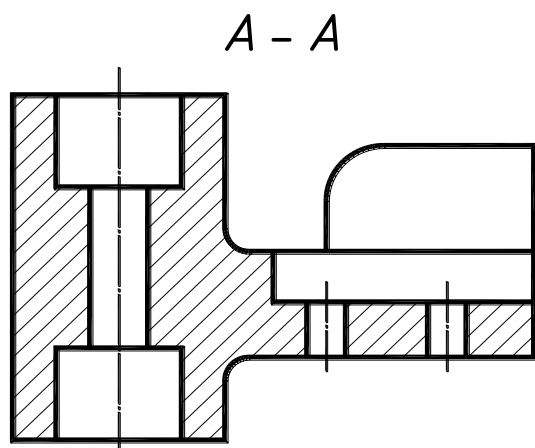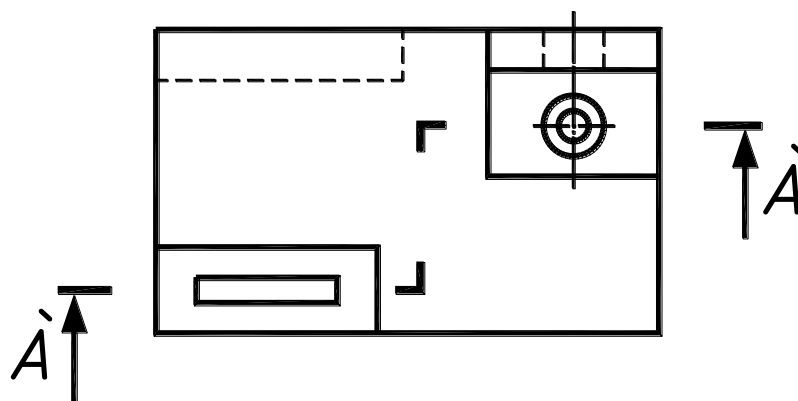## To specify the correct representational of section A-A
Variants of answers

1.

$A - A$

3.

$\grave{A} - \grave{A}$

2.

$A - A$

4.

$A - A$

$\grave{A}$

$\grave{A}$

Variant №2
To specify the correct representational of section A-A
Variants of answers
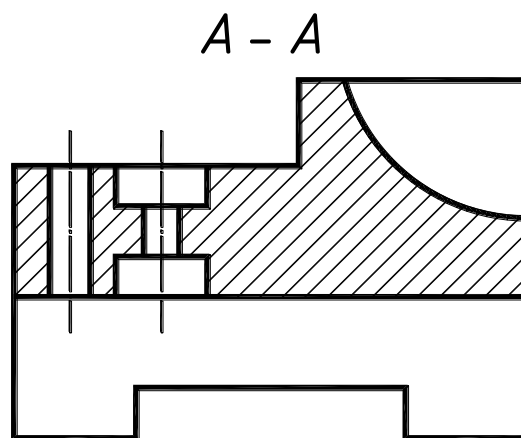
1.

$A - A$

3.

$À - À$

2.

$A - A$

4.

$À - À$

$À$
A
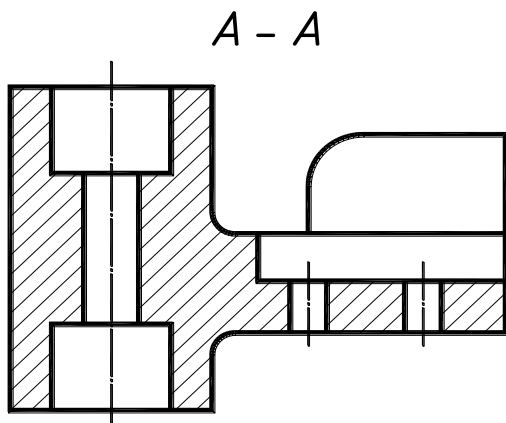
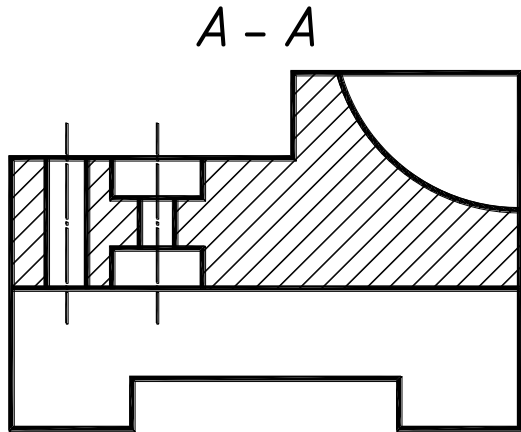# Variant №3
To specify the correct representational of section A-A
Variants of answers

1.

$A - A$

3.

$\grave{A} - \grave{A}$

2.

$A - A$

4.

$A - A$

A A
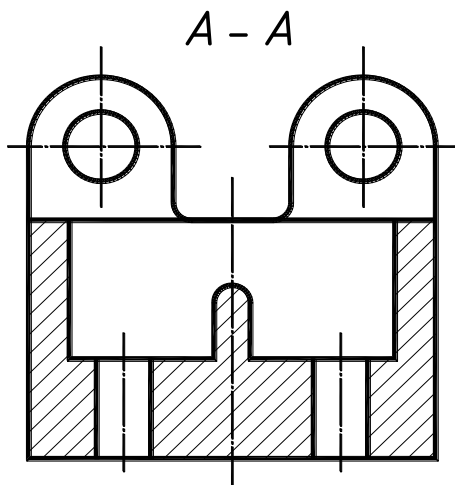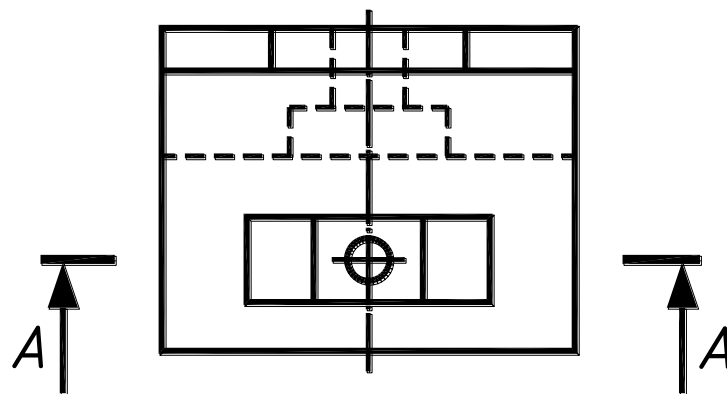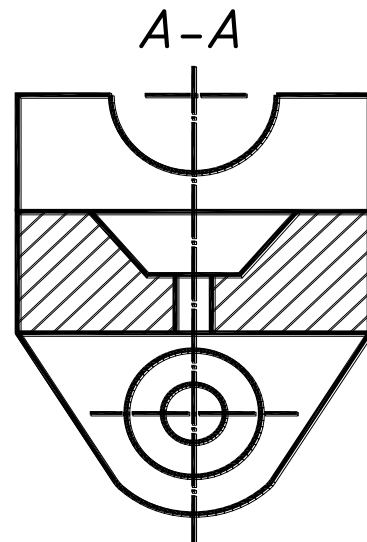
Variant №4
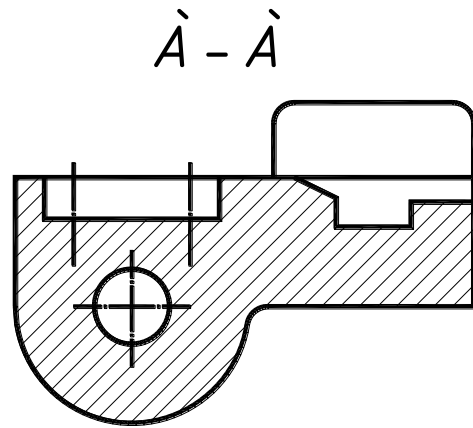## To specify the correct representational of section A-A
Variants of answers

1.

$A - A$

3.

$À - À$

2.

$A - A$

4.

$A - A$
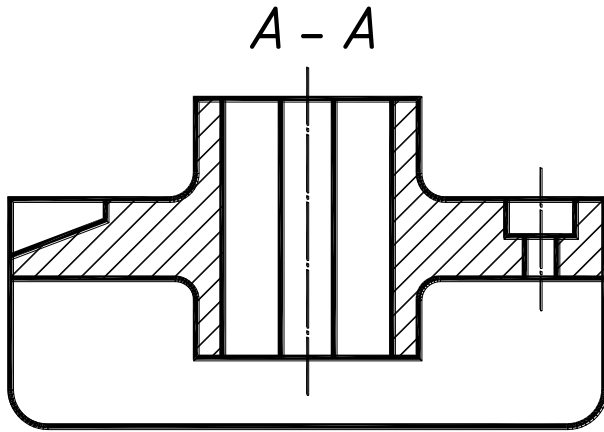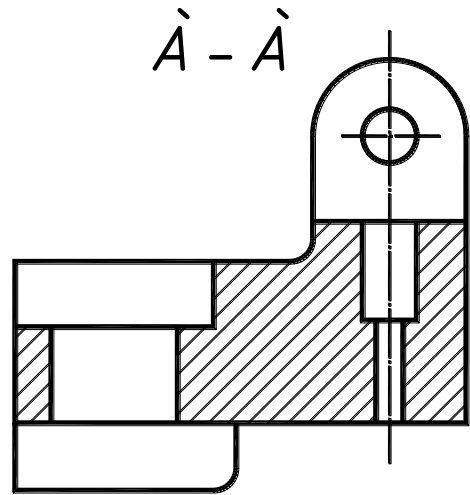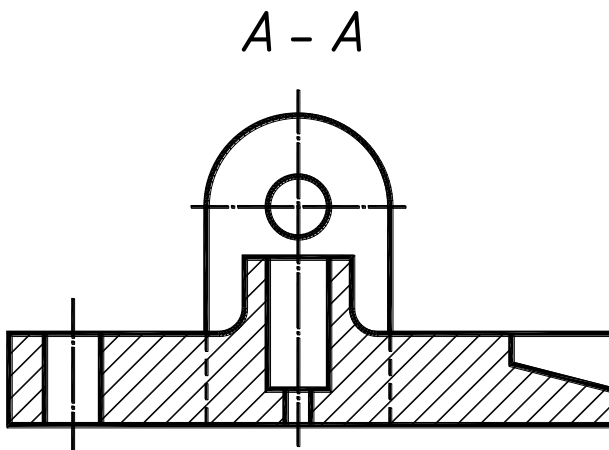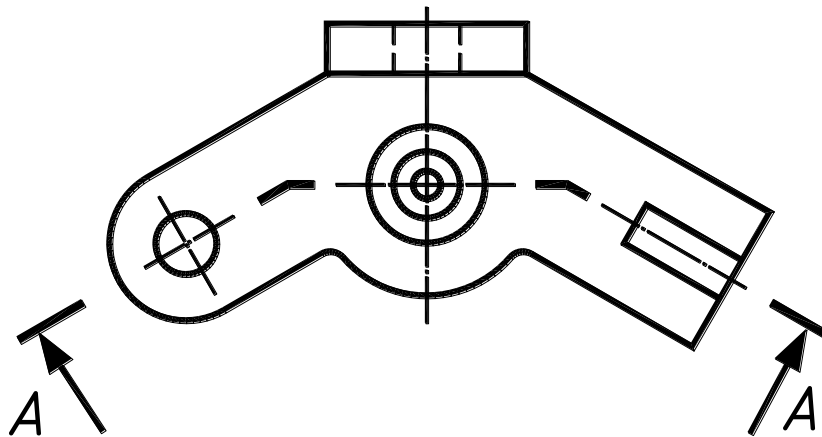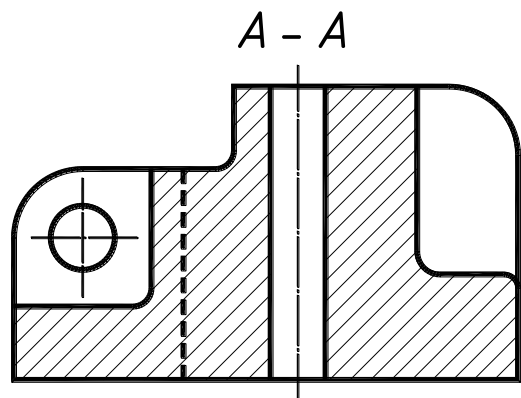
Variant №5
To specify the correct representational of section A-A
Variants of answers

1.

A – A

3.

A – A

2.

A – A

4.

A – A

A

A
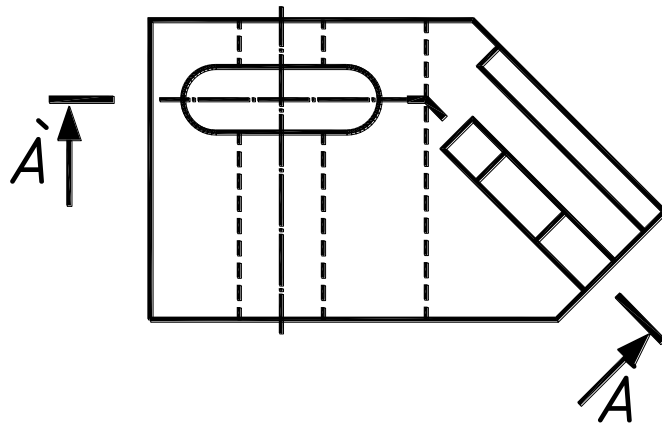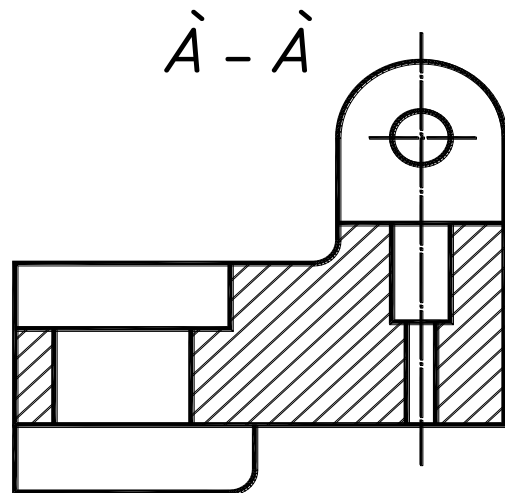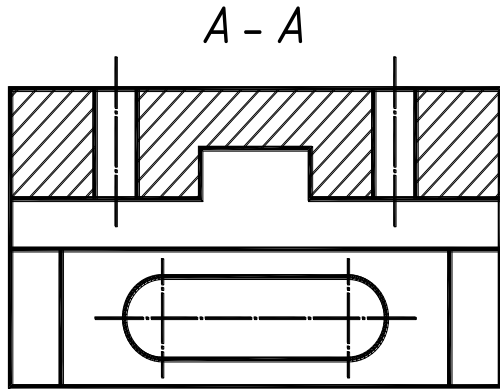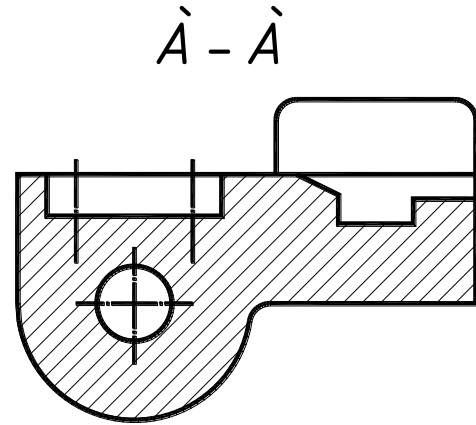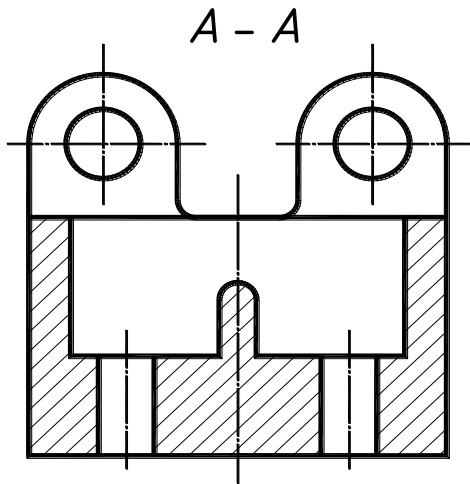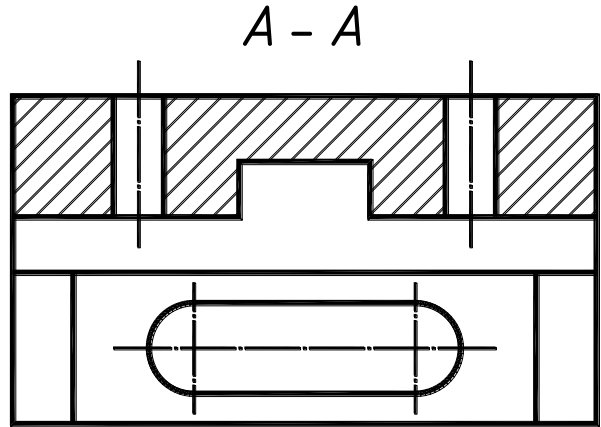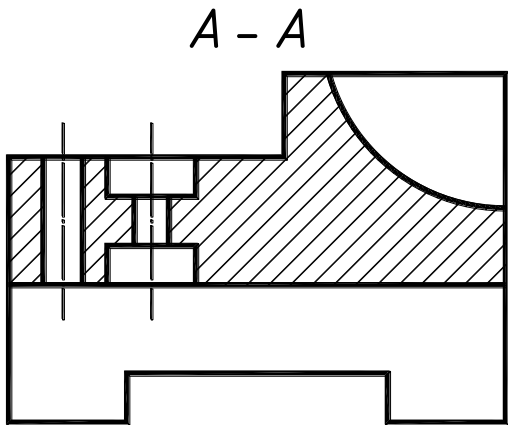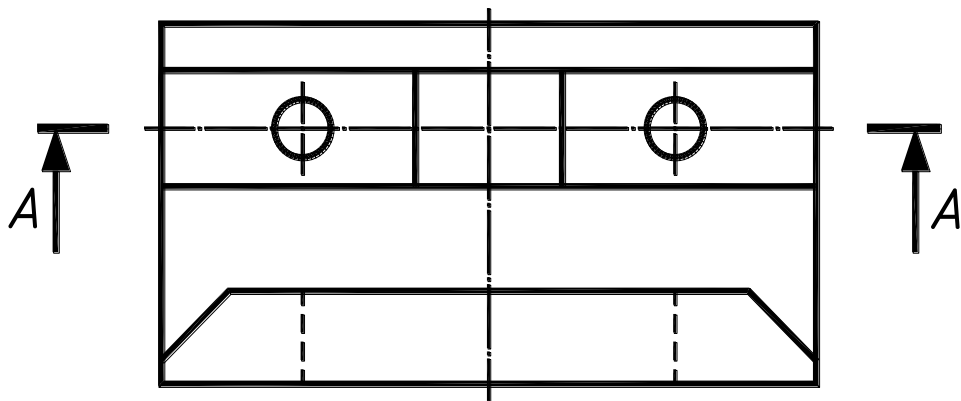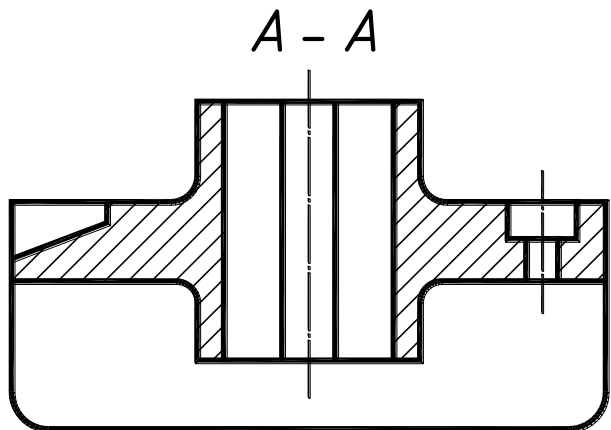
Task of examination № 1

Variant №1

1. Construct three projections of a pyramid with an aperture.
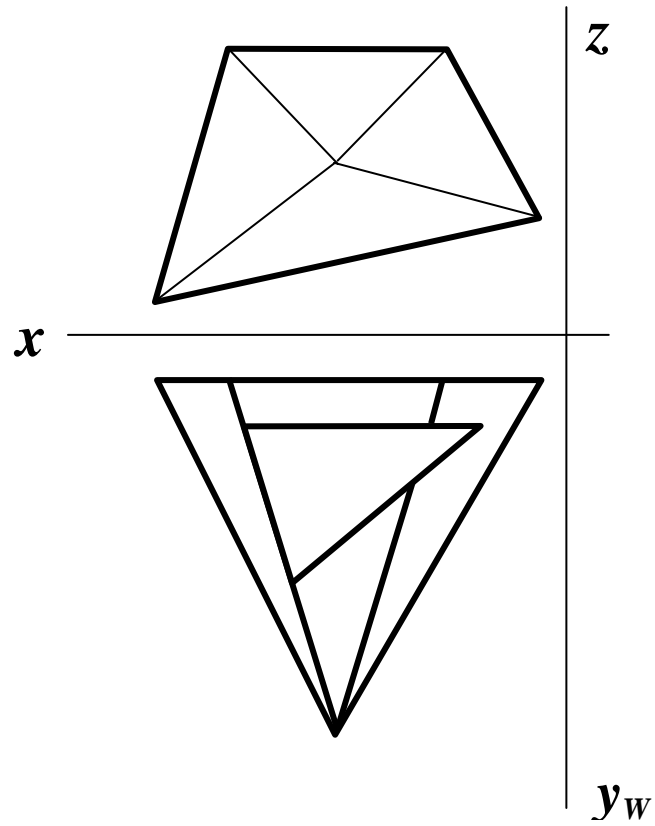
2. Construct three projections of a cone with an aperture
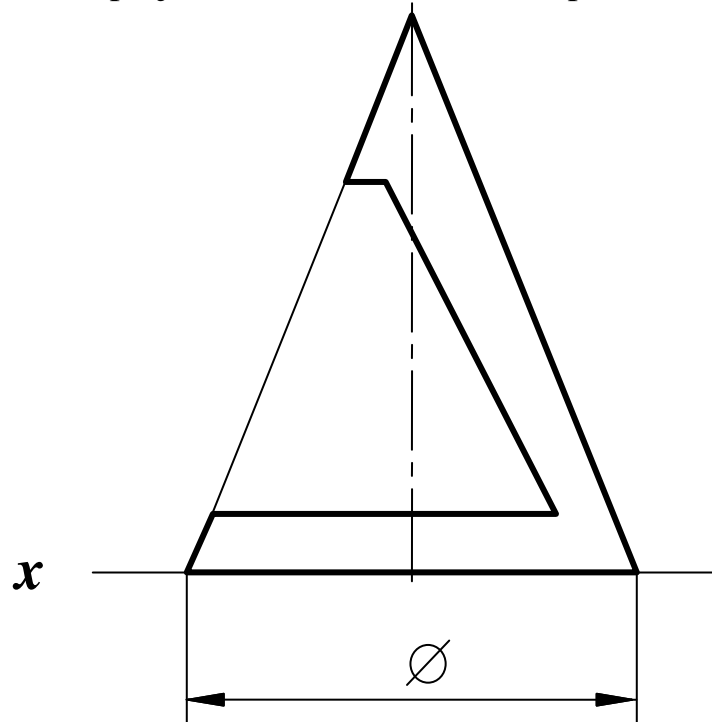
Variant №2

1. Construct three projections of a cylinder with an aperture.
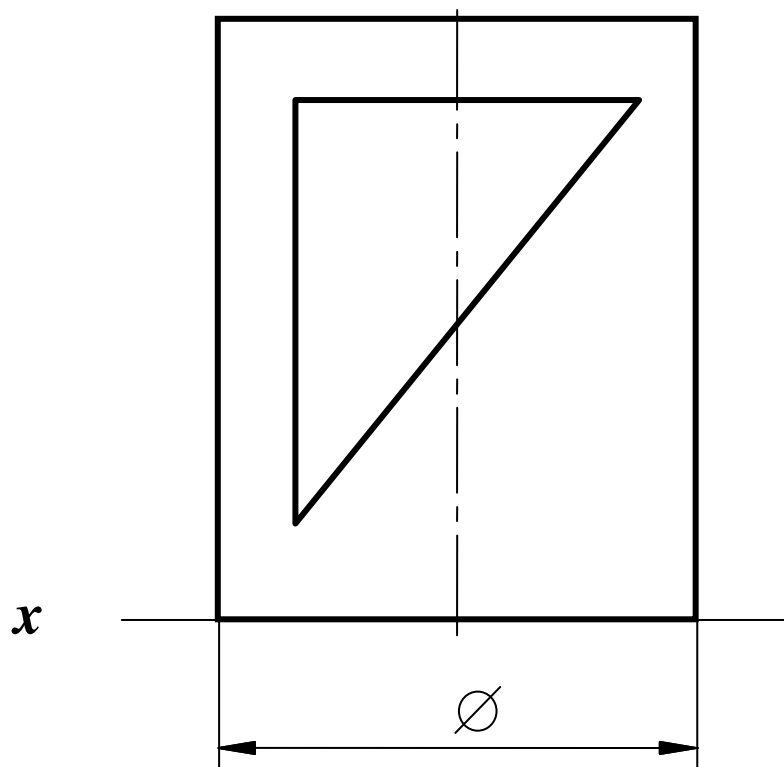
2. Construct three projections of a prism with an aperture.
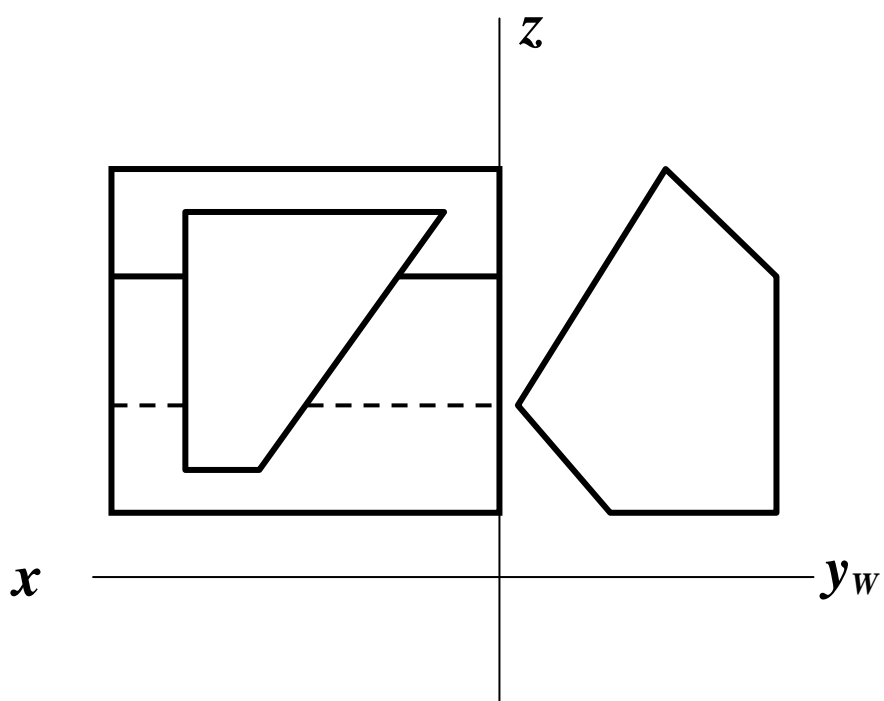
Variant №3

1. Construct three projections of a sphere with an aperture.

sphere ∅
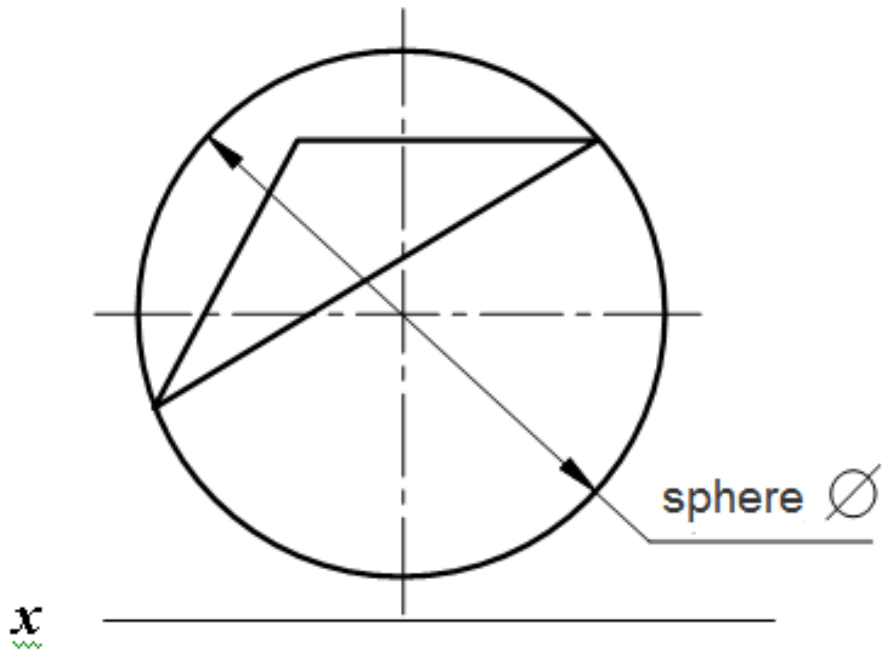
2. Construct three projections of a prism with an aperture.
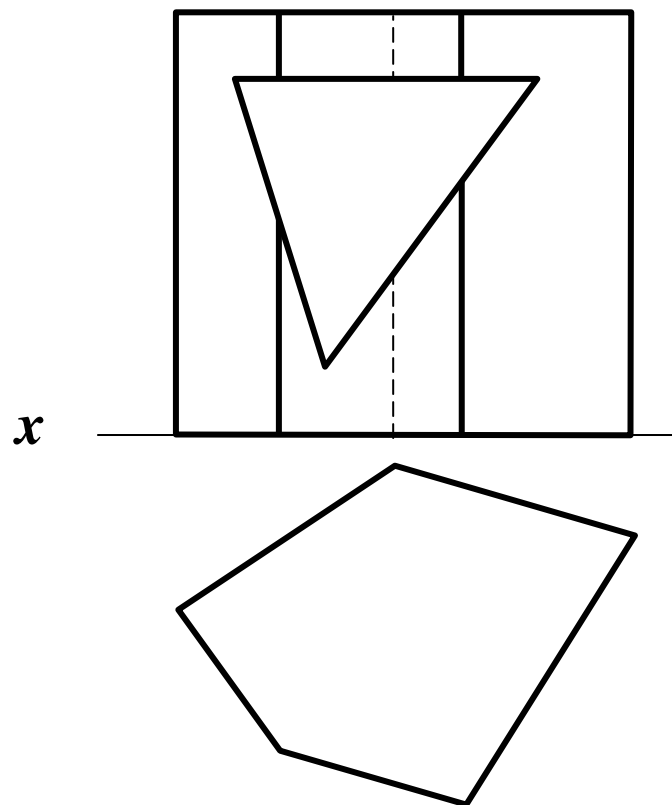
Variant №4

1. Construct three projections of a pyramid with an aperture.
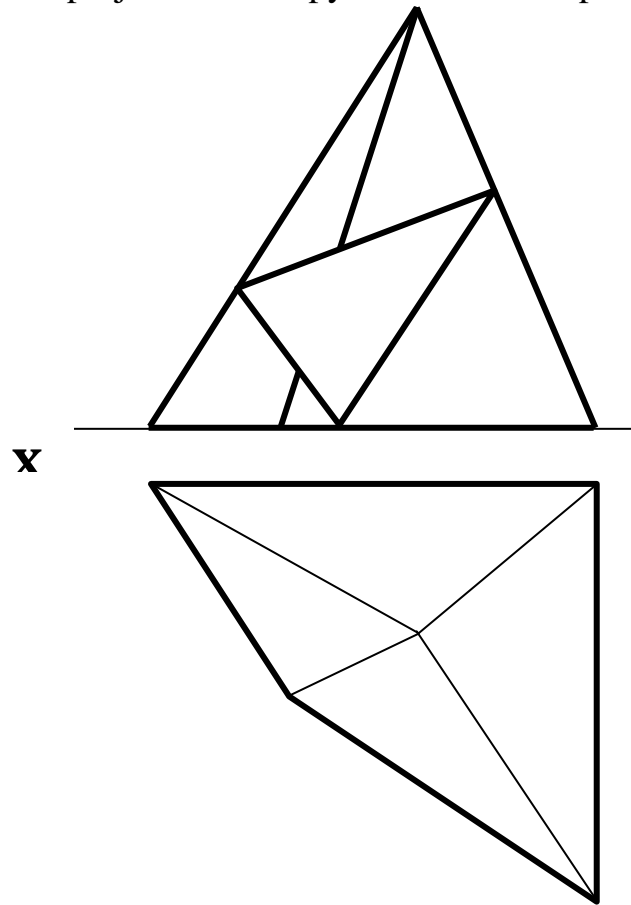
2. Construct three projections of a cylinder with an aperture.
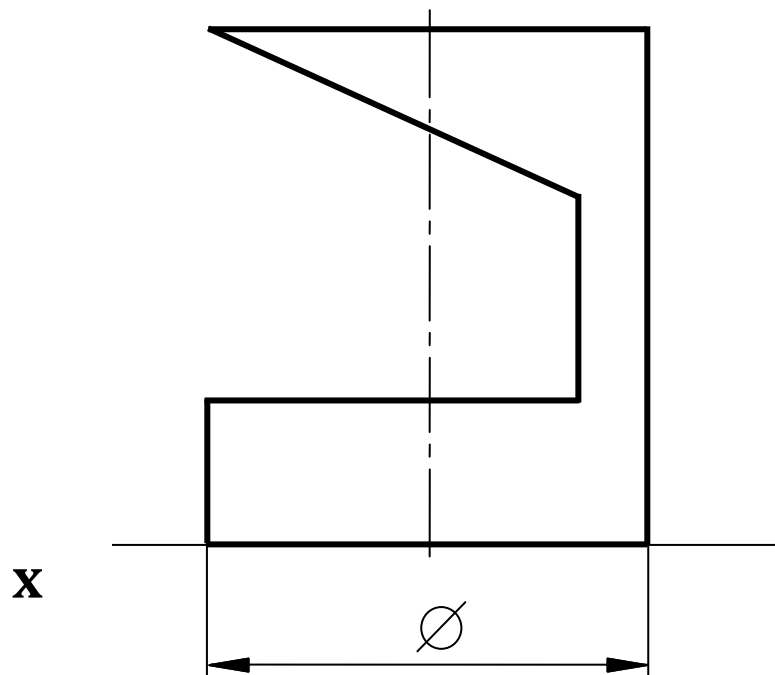
Variant №5

1. Construct three projections of a prism with an aperture.

2. Construct three projections of a prism with an aperture.

sphere Ø
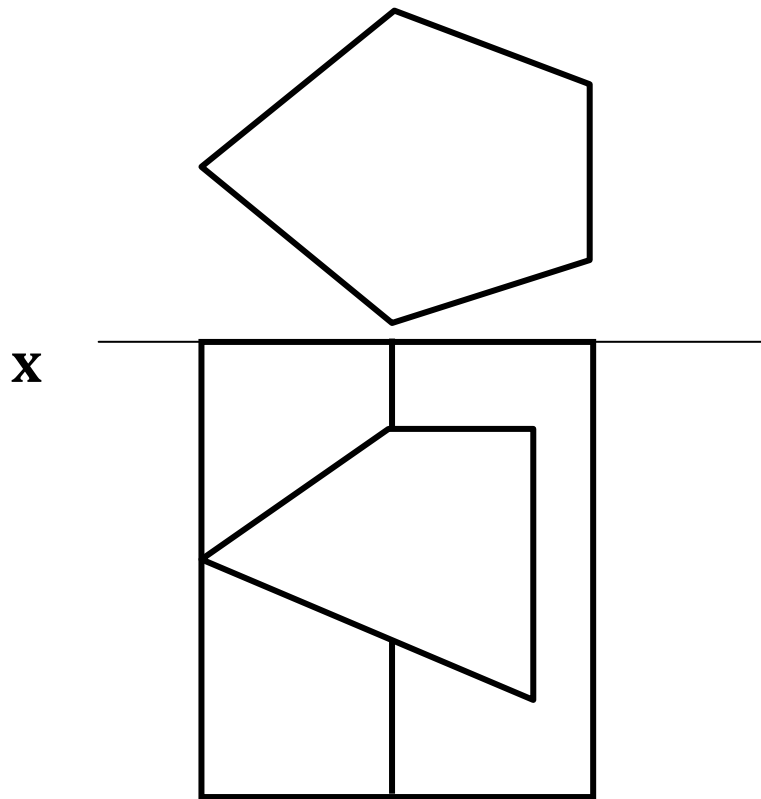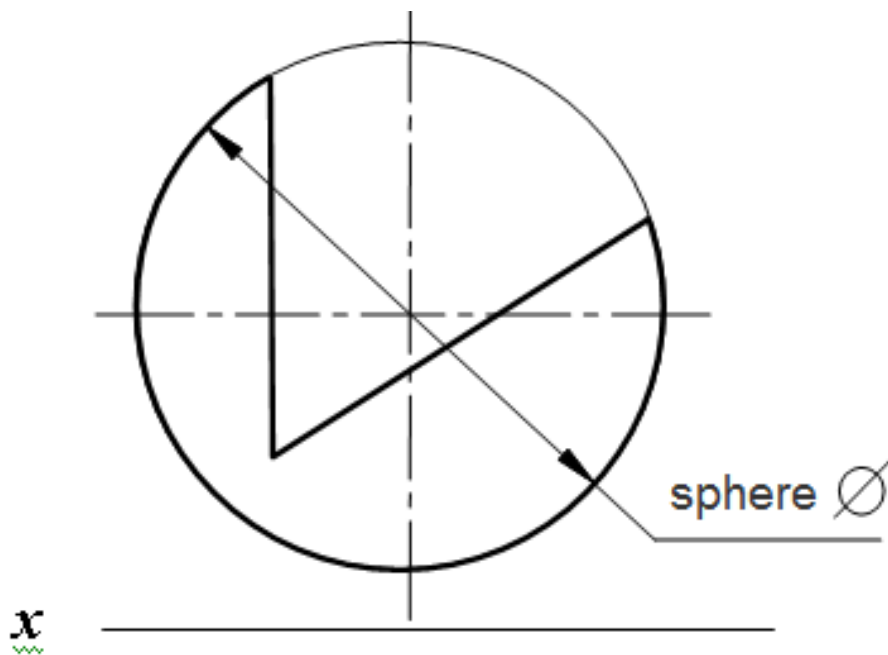
Task of examination № 2

Variant №1

1. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
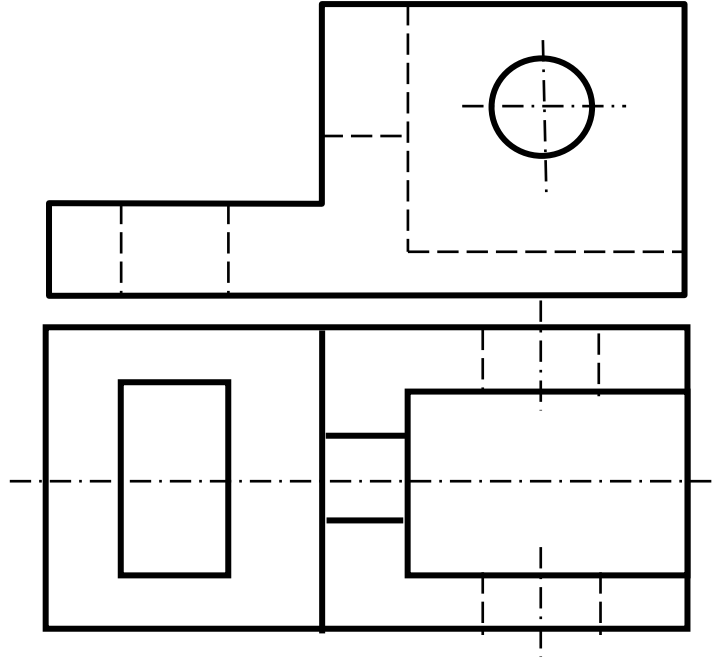
1. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
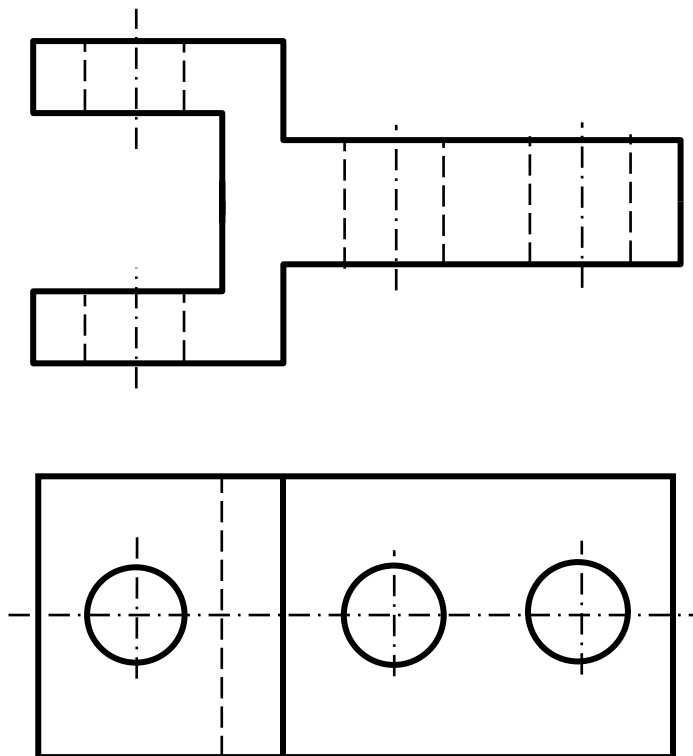
Variant №2

1. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
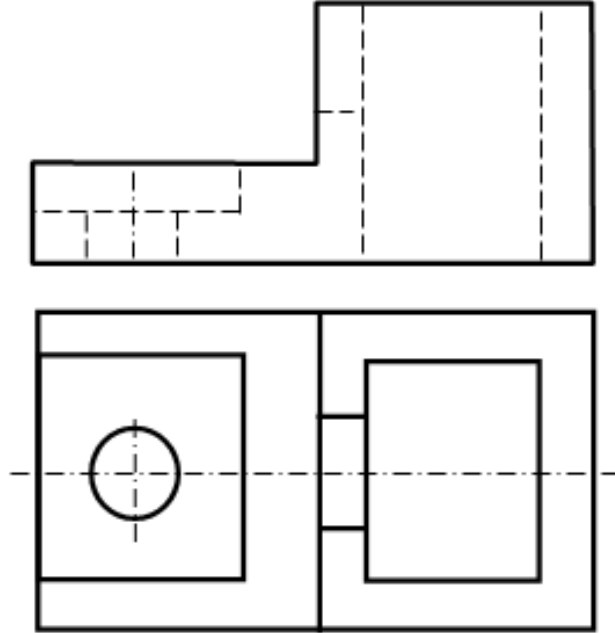
2. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
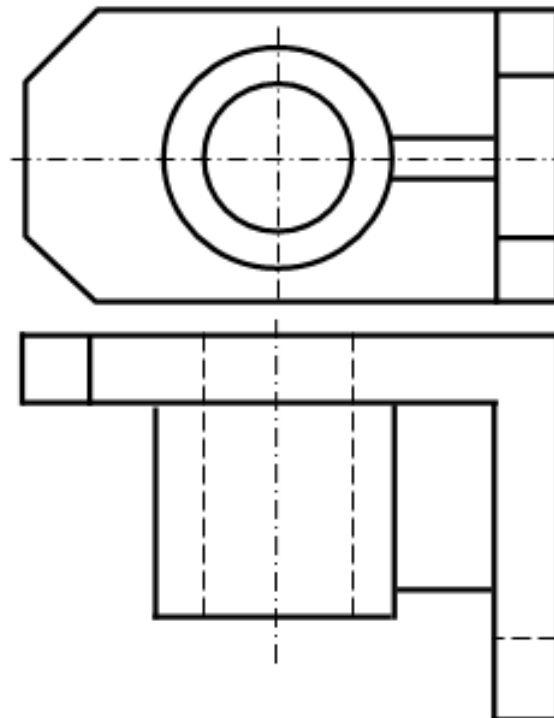
Variant №3

1. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
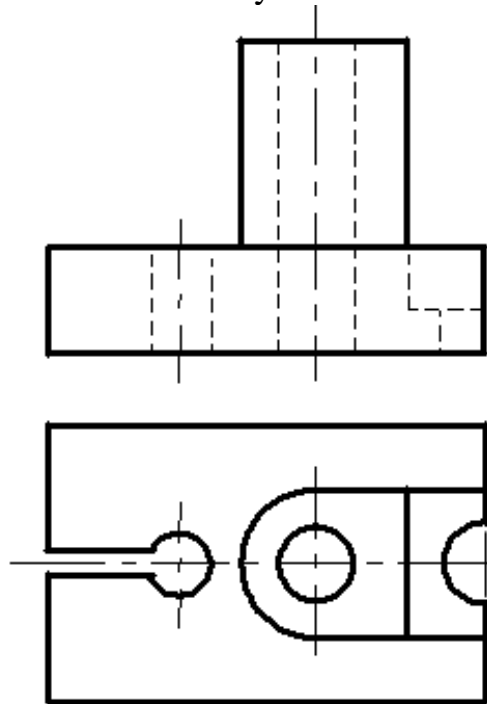
2. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
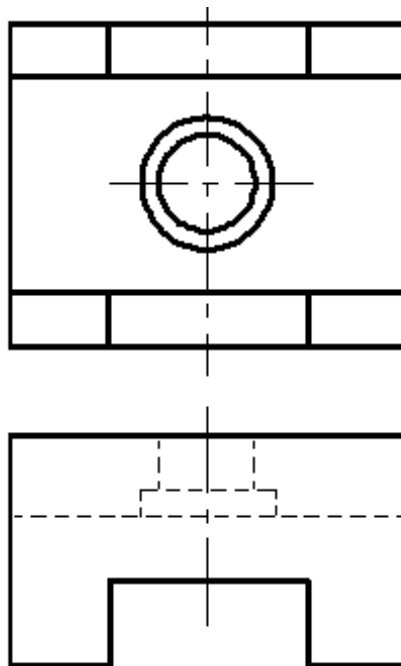
Variant №4

1. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
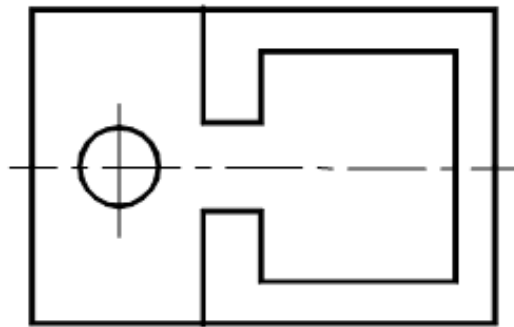
2. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
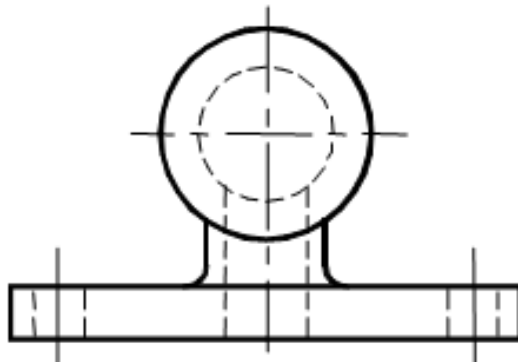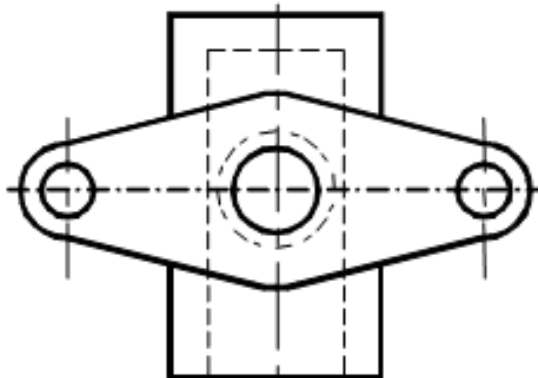
Variant №5

1. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
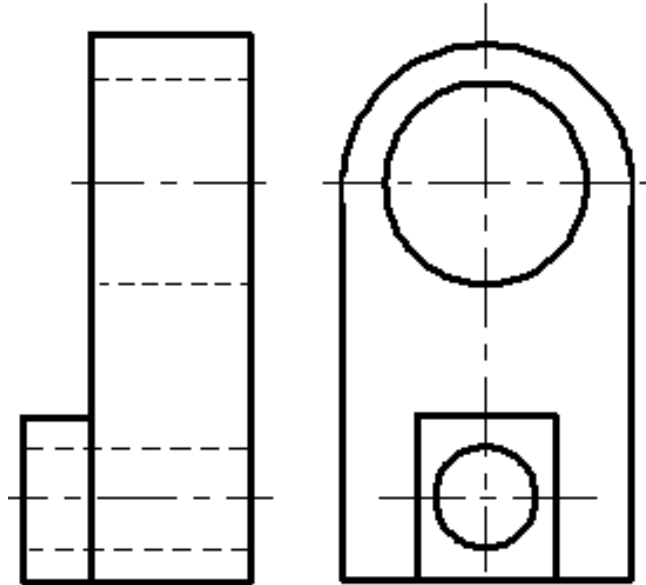
2. Below two given representational, construct three representational of a detail. Execute necessary sections. Put the sizes.
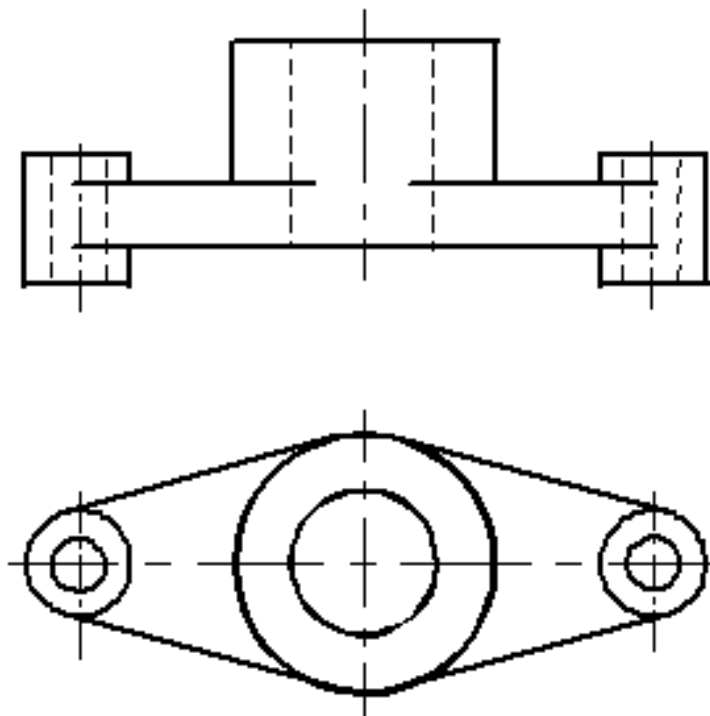
Task of examination № 3

Variant №1

Draw details in assembly, on a detail *1* designate a groove trumpet 1¼″.
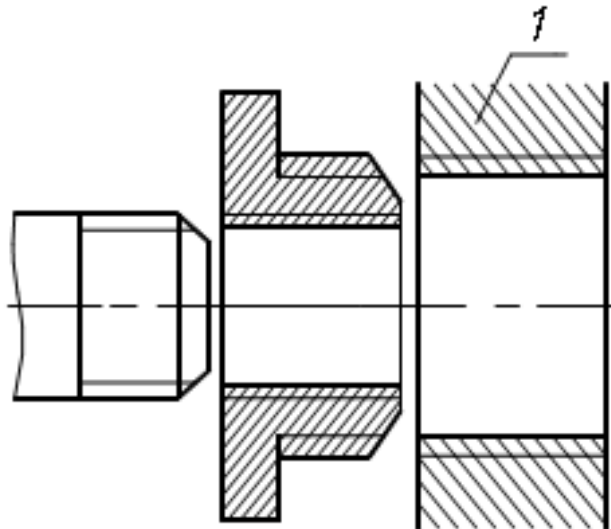
Variant №2

Draw details in assembly, on a detail *1* designate a groove trumpet 1″.
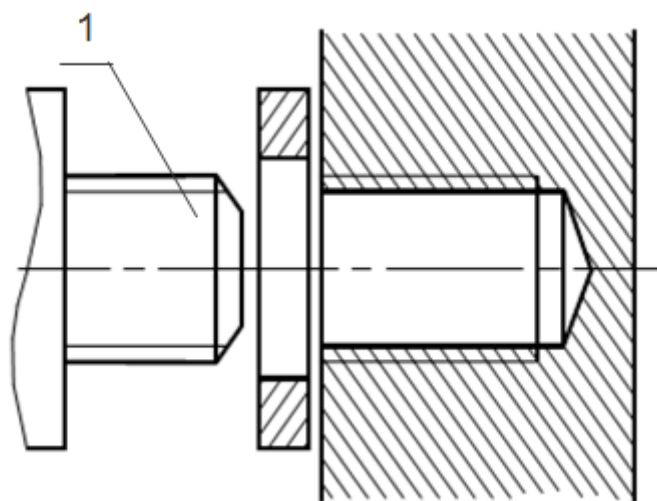
Variant №3

Draw details in assembly, on a detail *1* designate a groove trumpet ¼″.
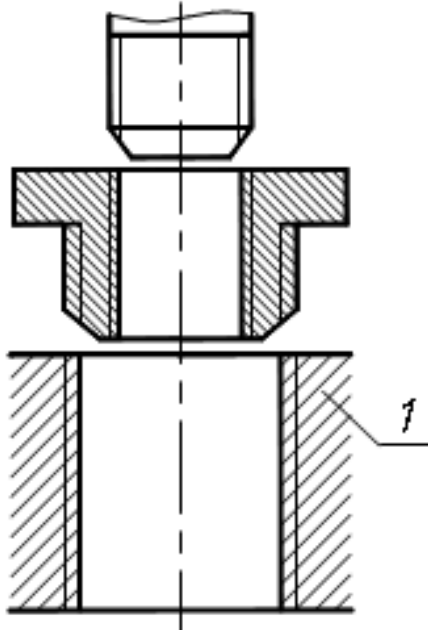
Variant №4

Draw details in assembly, on a detail *1* designate a groove trumpet 1¼″.
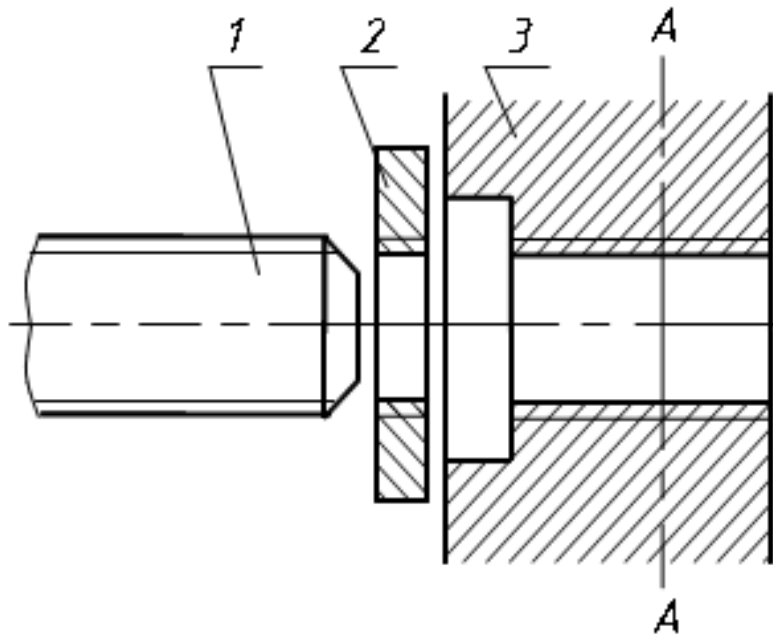
Variant №5

Draw details in assembly, on a detail *1* designate a groove trumpet 1″.
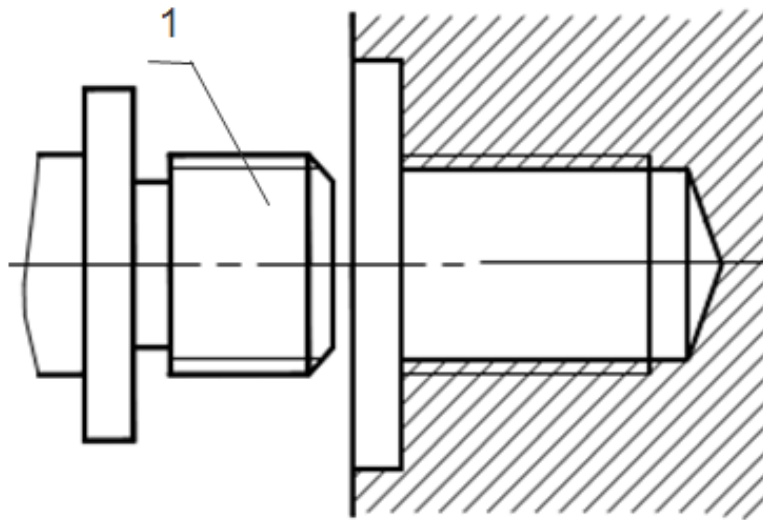
Task of examination № 4

Variant №1
On a general view to execute the drawing of the specified detail.

Variant №2

On a general view to execute the drawing of the specified detail.
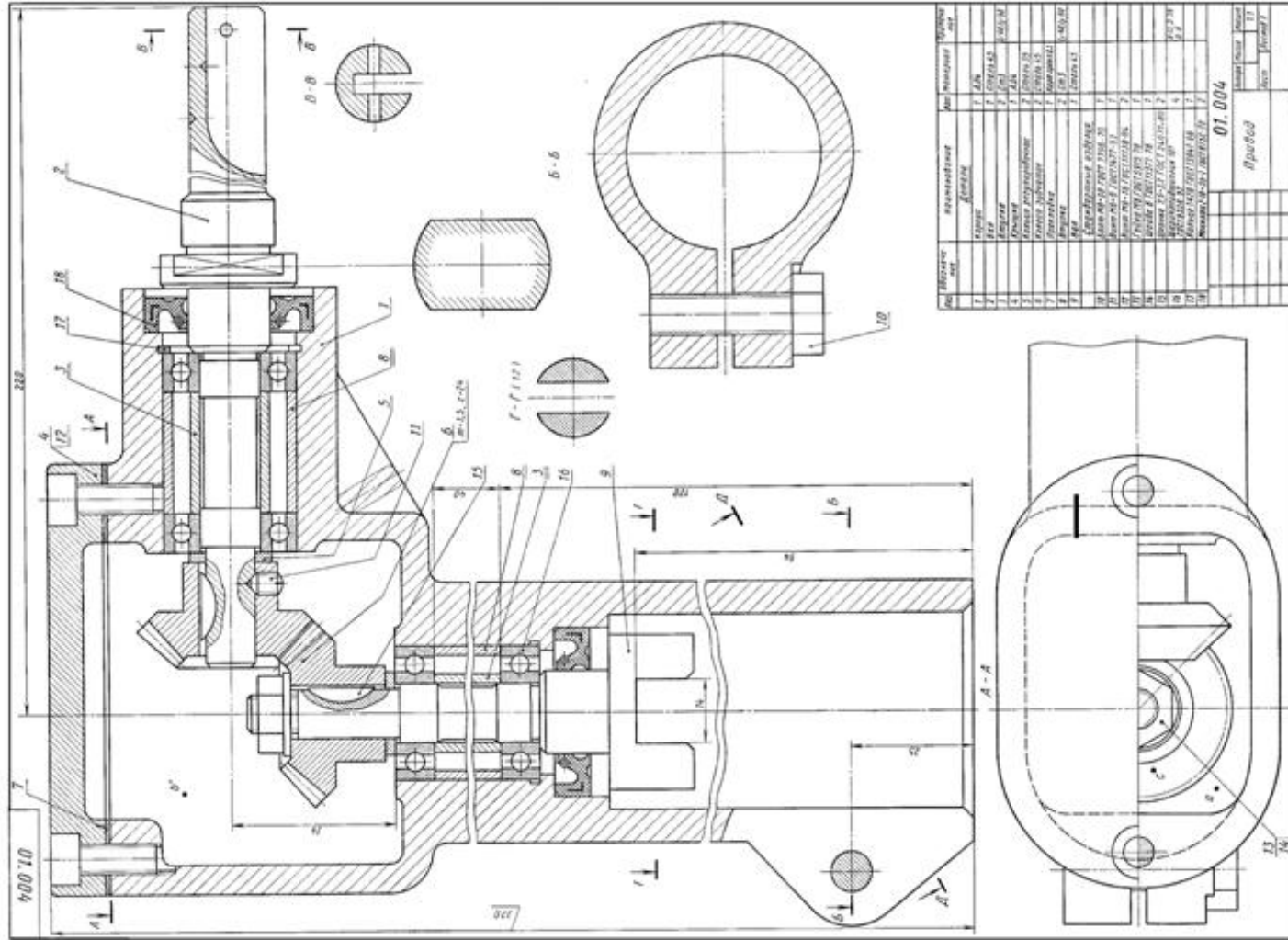
Variant №3

On a general view to execute the drawing of the specified detail.
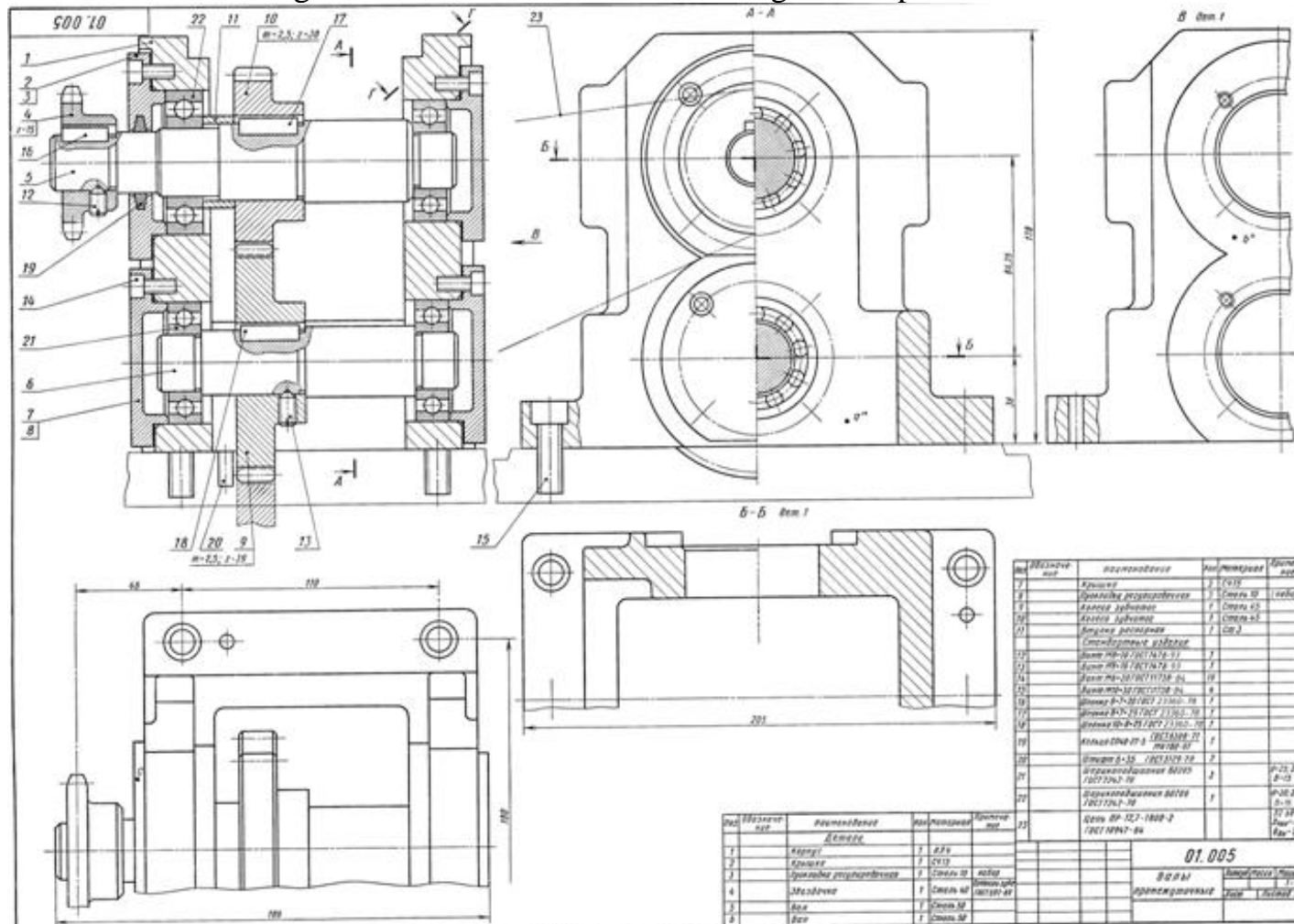
Variant №4

On a general view to execute the drawing of the specified detail.
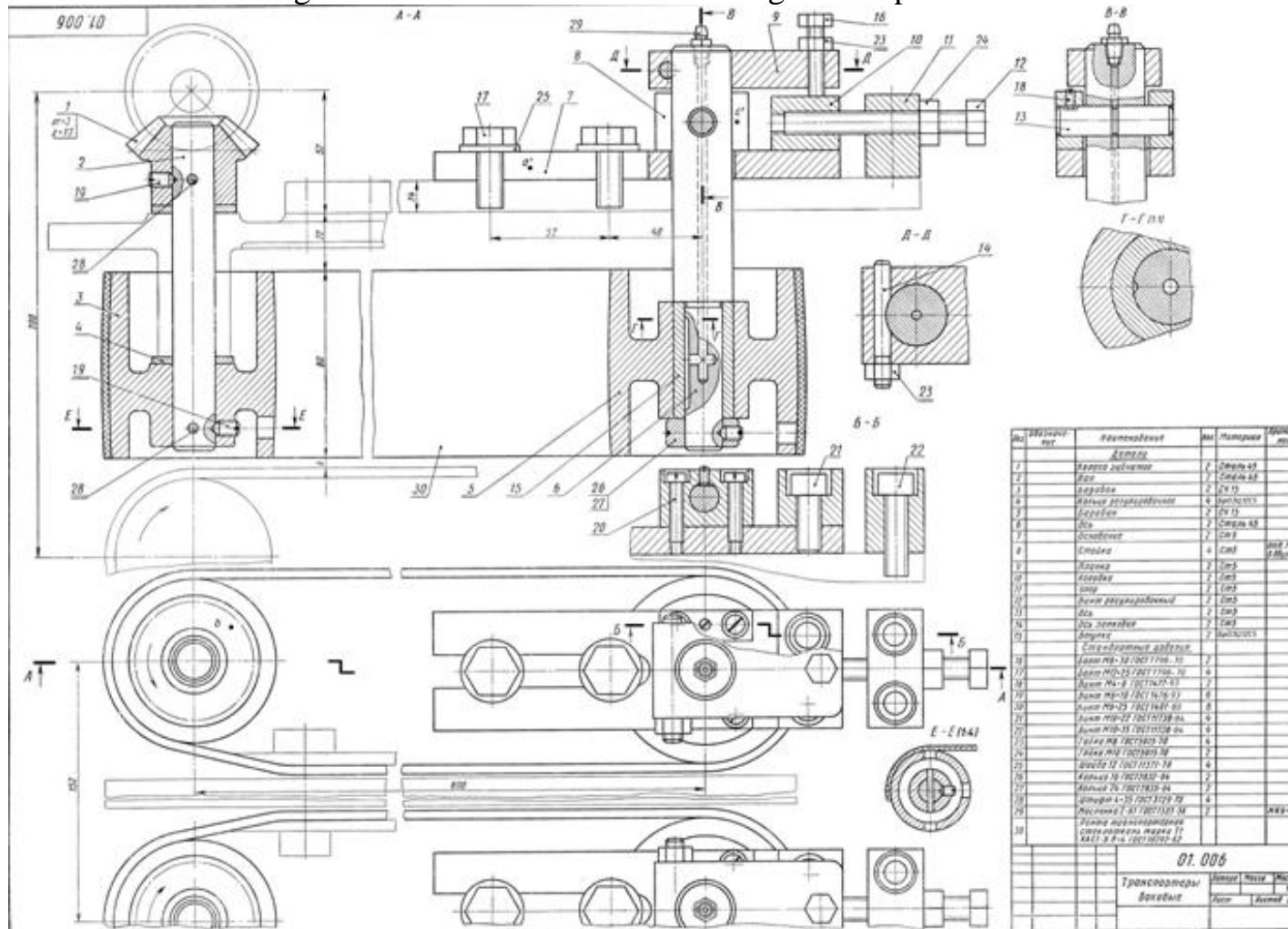
Variant №5

On a general view to execute the drawing of the specified detail.
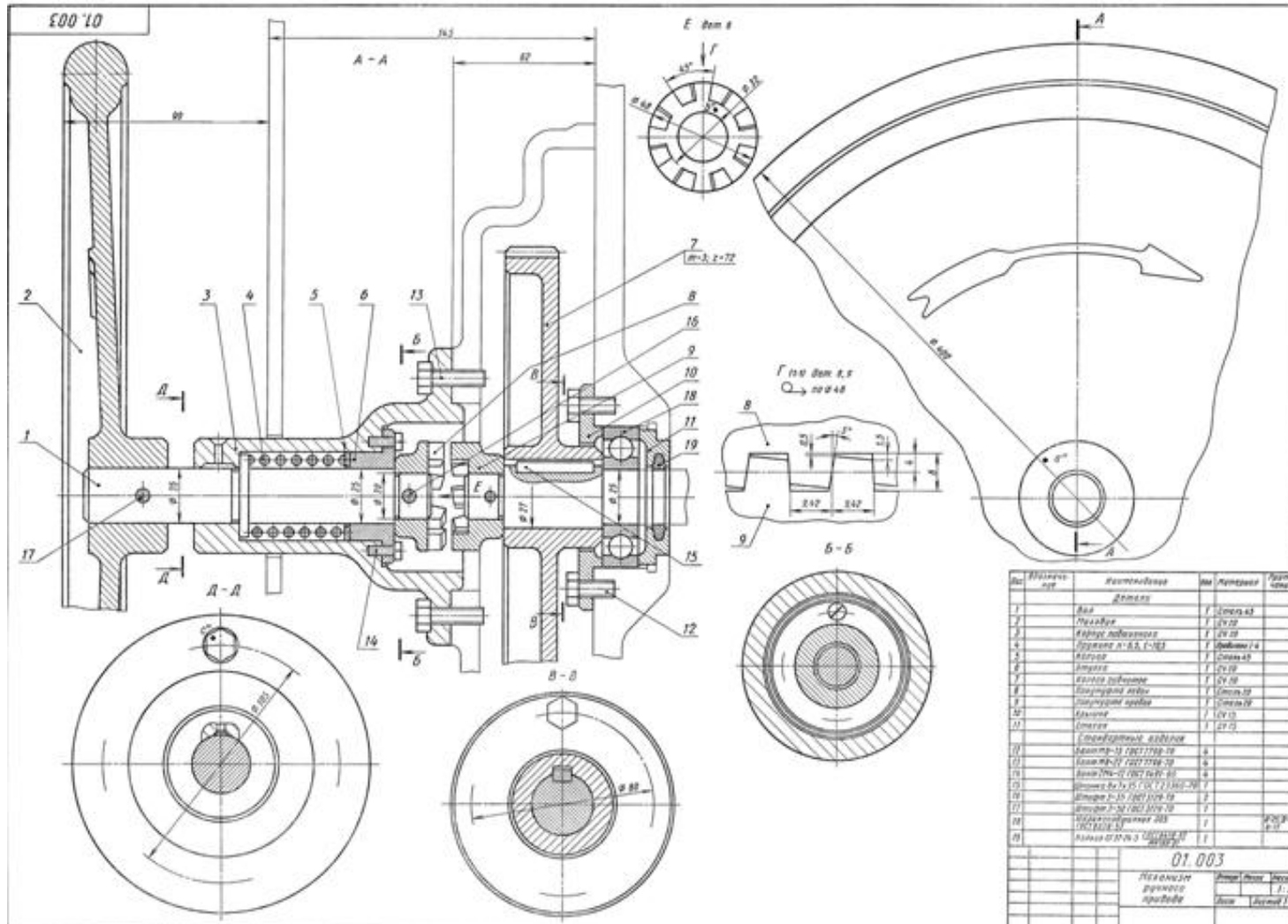
Final Test

THE EXAMINATION CARD № 1
DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 1

1. *Construct three views of a pyramid with a pyramid notch (15 points)*

2. *Construct three views of the component shown, given two data. Draw rational sections. Show the dimensions. Construct isometric of the component with a partial notch. (25 points)*

HAS MADE
Lecturer _____ */R.G.Dolotova/*
I ASSERT
Heard of department _____ */G.V.Kashkan/*
«   »   2013 г.

DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 1

1. *Construct three views of a pyramid with a prism notch   (15 points)*

2. *Construct three views of the component shown, given two data. Draw rational sections. Show the dimensions. Construct isometric of the component with a partial notch. (25 points)*

HAS MADE
Lecturer   _____ /R.G.Dolotova/
I ASSERT
Heard of department   _____ /G.V.Kashkan/
«   »   2013 г.

THE EXAMINATION CARD № 3
DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 1

1. *Construct three views of a pyramid with a prism notch   (15 points)*

2. *Construct three views of the component shown, given two data. Draw rational sections. Show the dimensions. Construct isometric of the component with a partial notch. (25 points)*

HAS MADE
Lecturer   _____ /R.G.Dolotova/
I ASSERT
Heard of department   _____ /G.V.Kashkan/
«   »   2013 г.

DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 1

1. *Construct three views of a pyramid with a prism notch   (15 points)*

2. *Construct three views of the component shown, given two data. Draw rational sections. Show the dimensions. Construct isometric of the component with a partial notch. (25 points)*

HAS MADE
Lecturer   _____ /R.G.Dolotova/
I ASSERT
Heard of department   _____ /G.V.Kashkan/
«   »   2013 г.
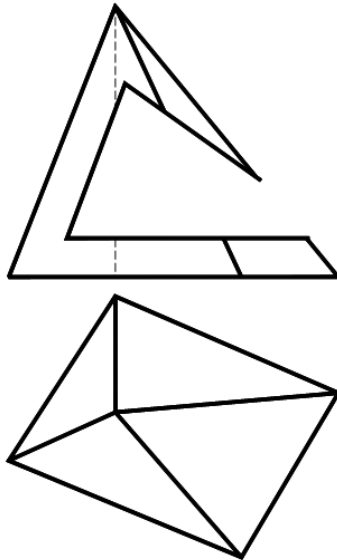
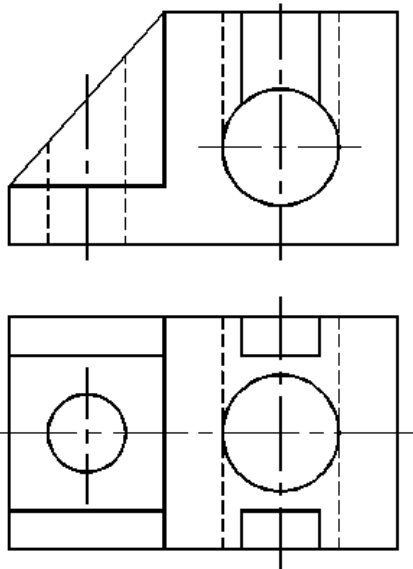**DISCIPLINE:** *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 1

1. *Construct three views of a pyramid with a prism notch   (15 points)*

$\varnothing$

2. *Construct three views of the component shown, given two data. Draw rational sections. Show the dimensions. Construct isometric of the component with a partial notch. (25 points)*

HAS MADE
Lecturer   _____ /R.G. Dolotova/
I ASSERT
Heard of department   _____ /G.V. Kashkan/
«   »   2013 г.

Graded Test

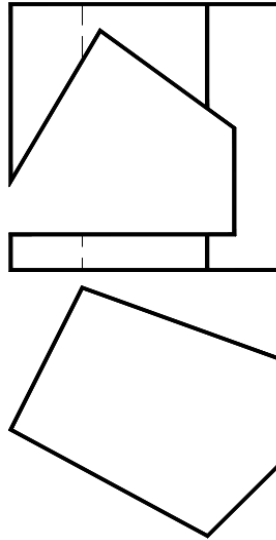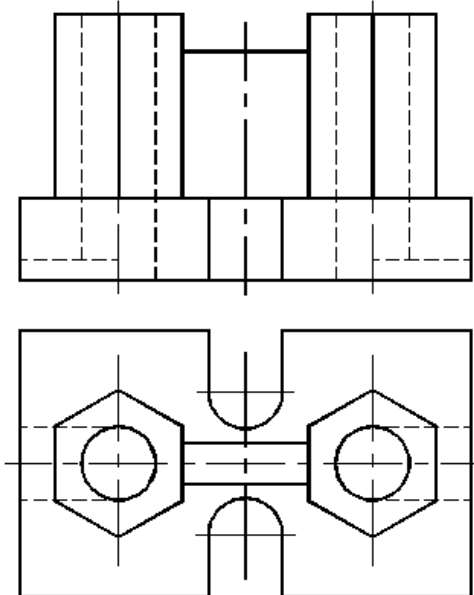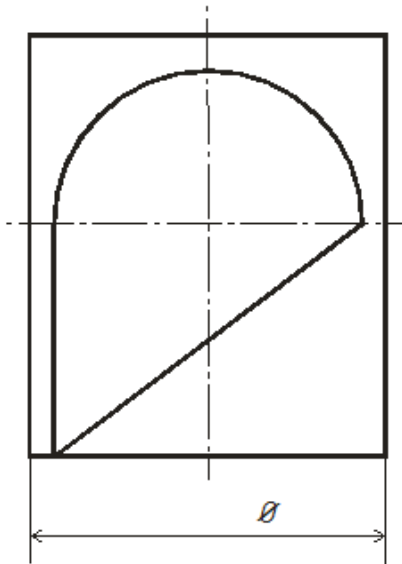# THE EXAMINATION CARD № 1
DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 2

1. *What are the principal views? How are they positioned on a drawing? What are the rules of designating a view having no projecting link with the principal view? (5 points)*
2. *What is thread? What are the characteristic parameters of thread? What is referred to as the thread profile? (5 points)*
3. *Construct a working drawing of a detail the 1. (30 points)*

HAS MADE
Lecturer   _____ /R.G.Dolotova/
I ASSERT
Heard of department   _____ /G.V.Kashkan/
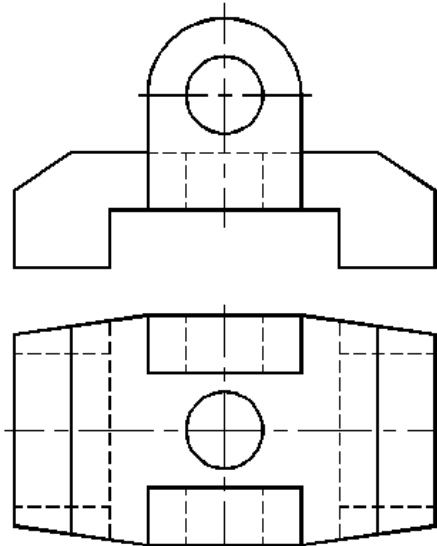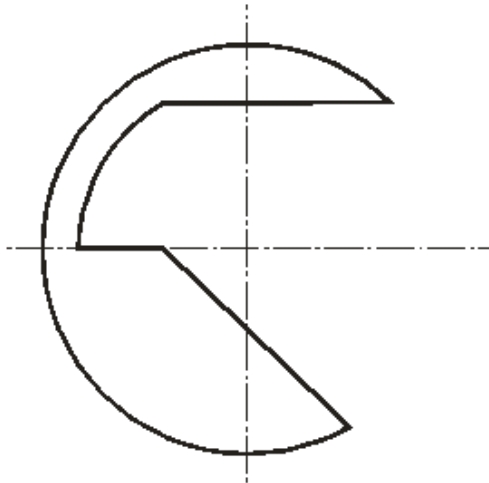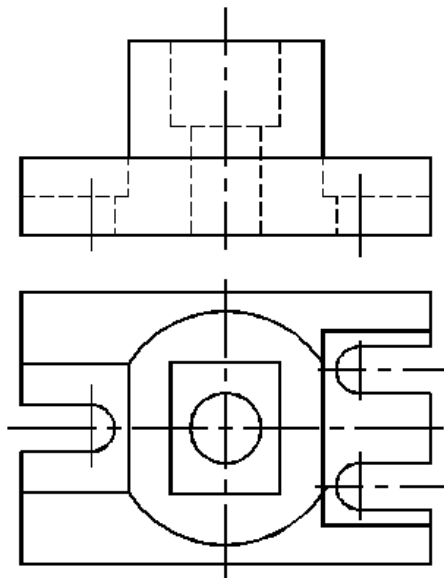«   »   2013 г.

DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 2

1. *What representation is called an auxiliary view, a detail view? In what cases are they applied and how are they denoted? When is it permitted to apply a break of a representation? (5 points)*
2. *What is pitch, lead of thread? How are they related? What is the basic difference between the metric and pipe threads, between trapezoidal and buttress threads? (5 points)*
3. *Construct a working drawing of a detail the 1. (30 points)*

HAS MADE
Lecturer   _____ /R.G.Dolotova/
I ASSERT
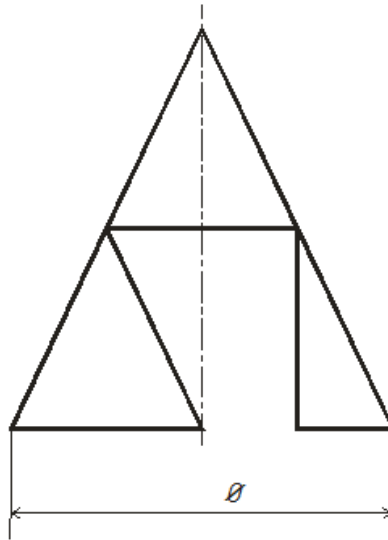Heard of department   _____ /G.V.Kashkan/
« » 2013 г.

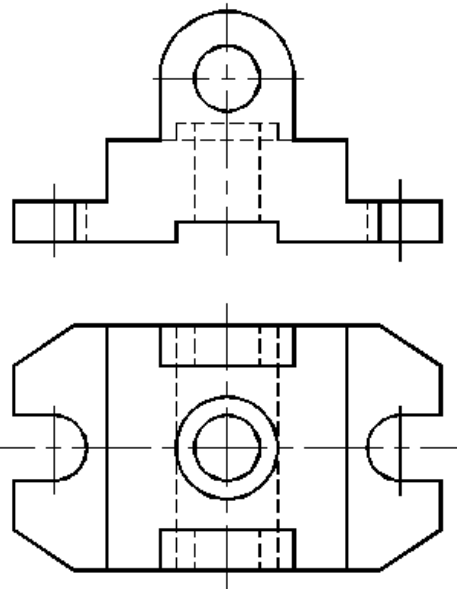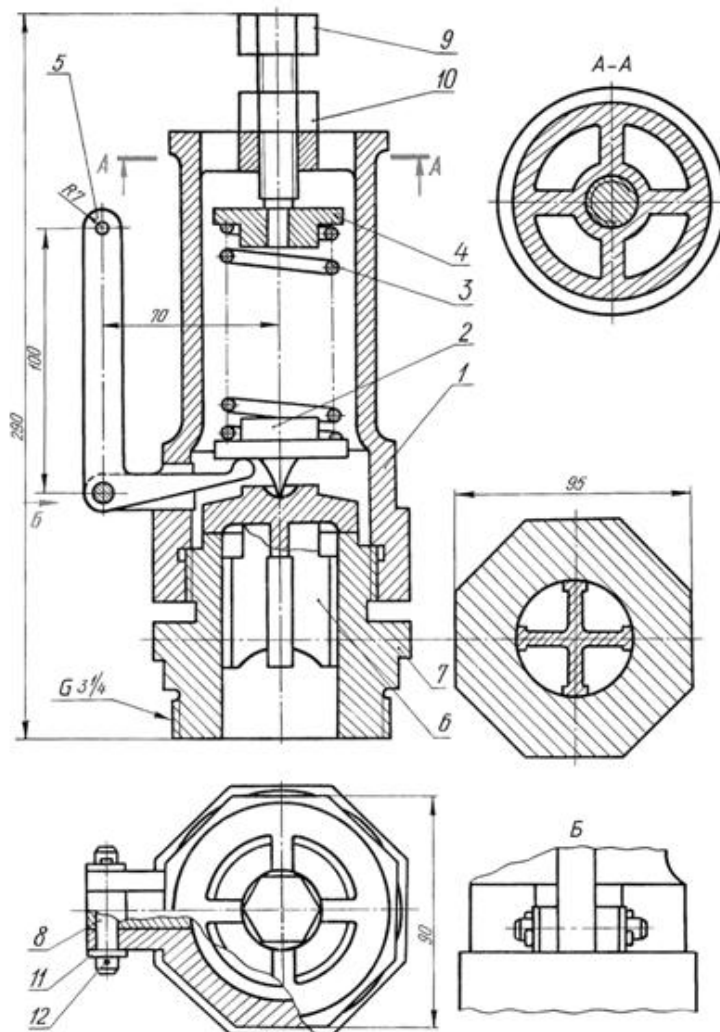# THE EXAMINATION CARD № 3

DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 2

1. What representation is called a sectional view? How are the sectional views classified depending on a cutting plane position relative to the horizontal projection plane or relative to the object; depending on a number of the cutting planes? *(5 points)*
2. How is thread representation on the shank and in the hole on the elevations obtained by projecting onto the planes, parallel and perpendicular to the axis of shank and hole? How is thread drawn in joints? *(5 points)*
3. *Construct a working drawing of a detail the 1. (30 points)*

HAS MADE
Lecturer _____ */R.G.Dolotova/*
I ASSERT
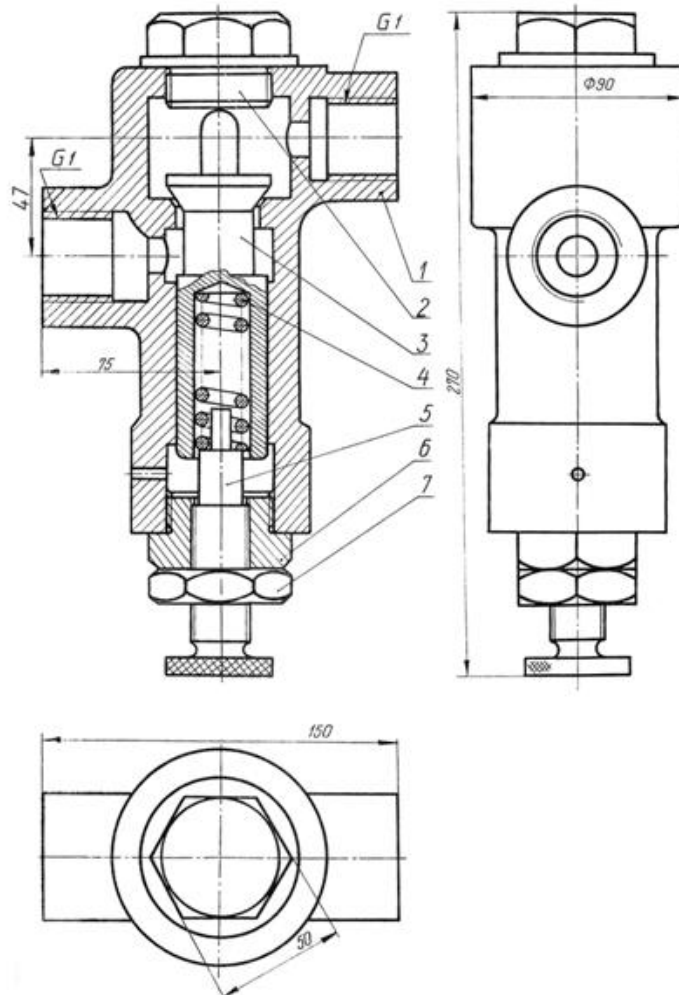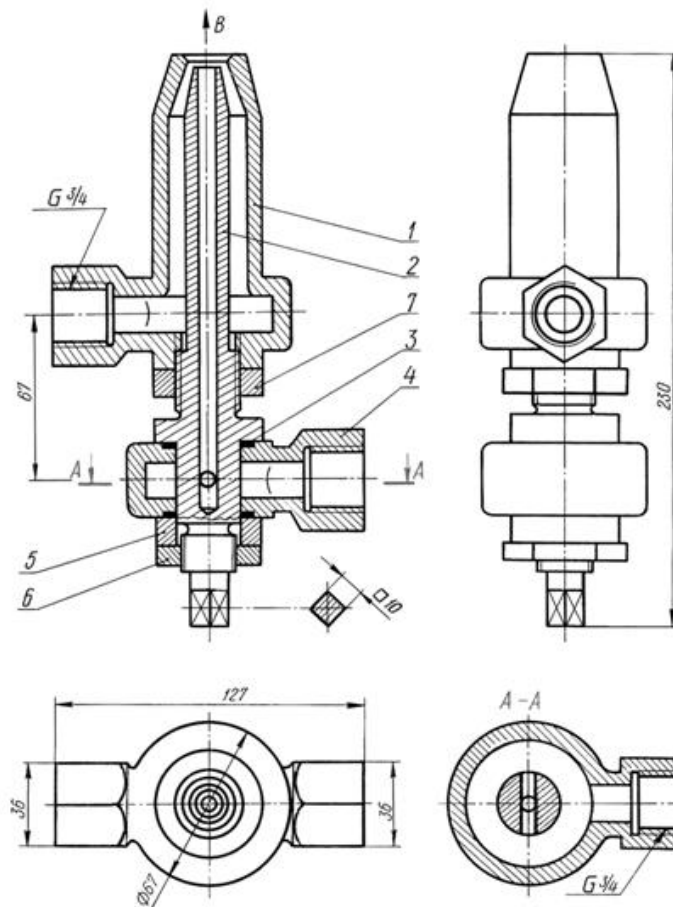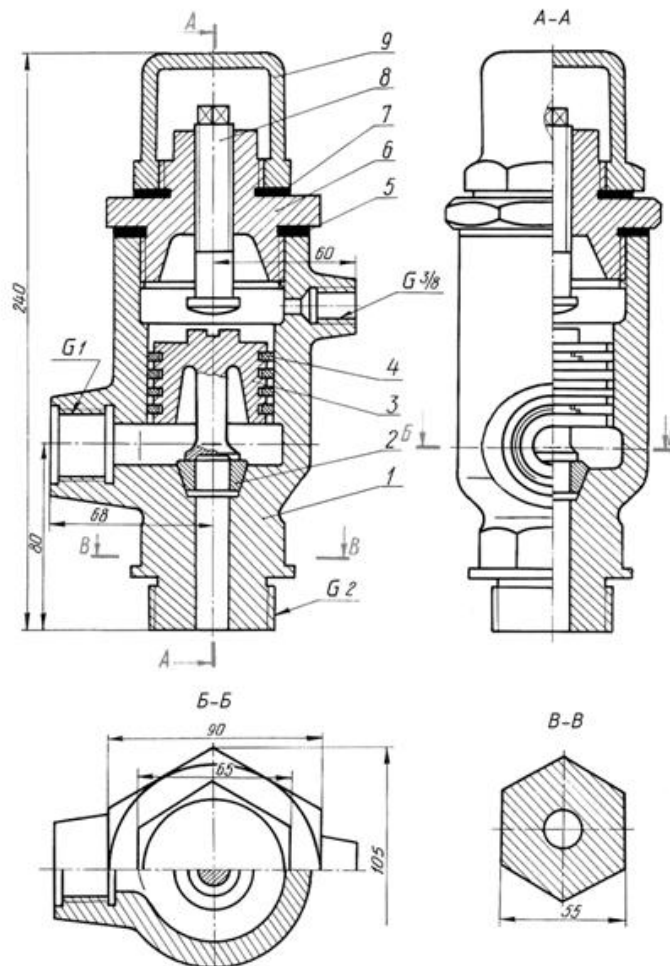Heard of department _____ */G.V.Kashkan/*
« » 2013 г.

THE EXAMINATION CARD № 4

DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 2

1. *What sectional view is referred to as a scrap one? In what cases are the sectional views not designated? What letters denote the sectional views? How are the complex sections classified? (5 points)*
2. *In what cases and in what way is the thread profile drawn? What data (in what sequence) are printed in standard threads' designations in the general case? (5 points)*
3. *Construct a working drawing of a detail the 1. (30 points)*

HAS MADE
Lecturer _____ /R.G.Dolotova/
I ASSERT
Heard of department _____ /G.V.Kashkan/
«   »   2013 г.
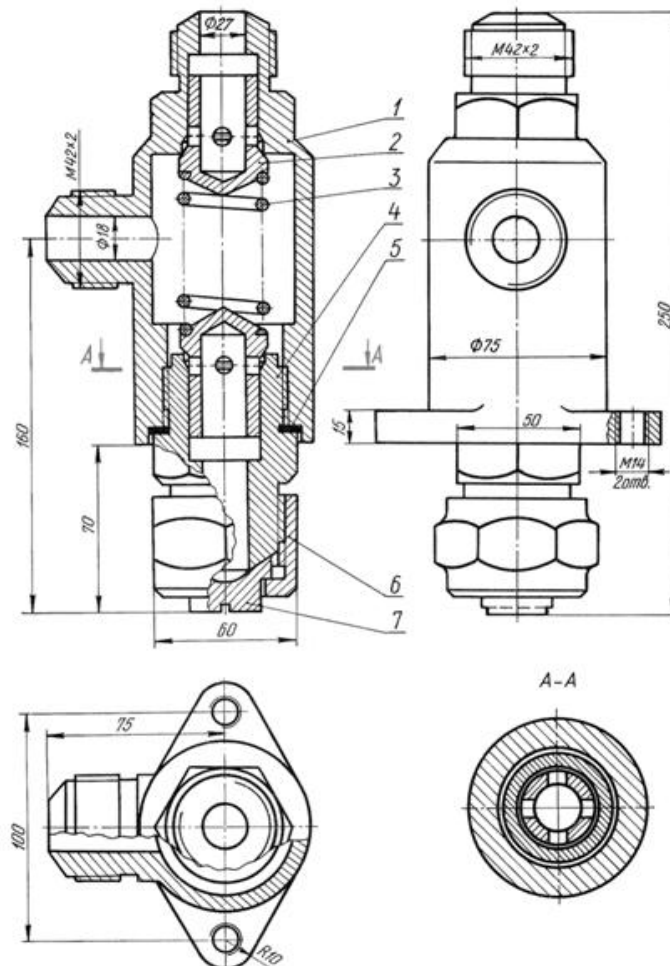
DISCIPLINE: *Descriptive geometry and engineering graphics*
STUDY MAJOR: 150700 Mechanical Engineering;
230100 Computer Science;140400 Electrical Engineering

Semester 2

1. *What simplifications are used when the projections of the intersection lines of surfaces are drawn? Are the small angles of taper and slopes shown in all drawings? How is knurling drawn? (5 points)*
2. *What is "right-hand" ("left-hand") thread? How are these terms shown in thread designation? What is the difference between designations of threads with coarse and fine pitch? (5 points)*
3. *Construct a working drawing of a detail the 1. (30 points)*

HAS MADE
Lecturer   _____ /R.G. Dolotova/
I ASSERT
Heard of department   _____ /G.V. Kashkan/
«   »   2013 г.