



**WSB University**

## **Engineering graphics**

### **Project**

Lecture 3 – introduction (November 13, 2024)

Laboratory 3 – working on the project (November 20, 2024)

Laboratory 4 – working on the project (January 22, 2025)

Deadline — send as a report (January 29, 2025)

Student's name:

Drawing number:

The person who created the laboratories:

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November 13, 2024 – January 29, 2025

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# 1 Project requirements

The grade will be based on careful execution of the drawing. The project should be sent as scans or photos to respond to the fourth task. The projects will be done and consulted during the following two classes (20 November 2024 and 22 January 2025). **The deadline to deliver the project is 29 January 2025.** Students may ask questions or schedule a consultation before the deadline (particularly during the two laboratories in which we will be doing the project).

## 2 Tools

The tools needed to do the first projects were given during the first lecture. The slide from the lecture is presented in Fig. 1.

The slide titled "Equipment" displays several drawing tools: a ruler, a pencil compass, a block for technical lettering, a setsquare, a technical block, and a set of sketch pencils. To the right of the tools is a table of contents for the course.

Equipment	Table of Contents
Ruler.	▶ Introduction
Pencil compass.	▶ Timetable and passing conditions
Block for technical lettering type B, italic – C	▶ Plan for the subject
	▶ Plan for the subject
	▶ Literature
	▶ Equipment
	▶ Basics about engineering graphic
	▶ Summary and conclusions
Setsquare.	
Technical block.	
Set of sketch pencils.	

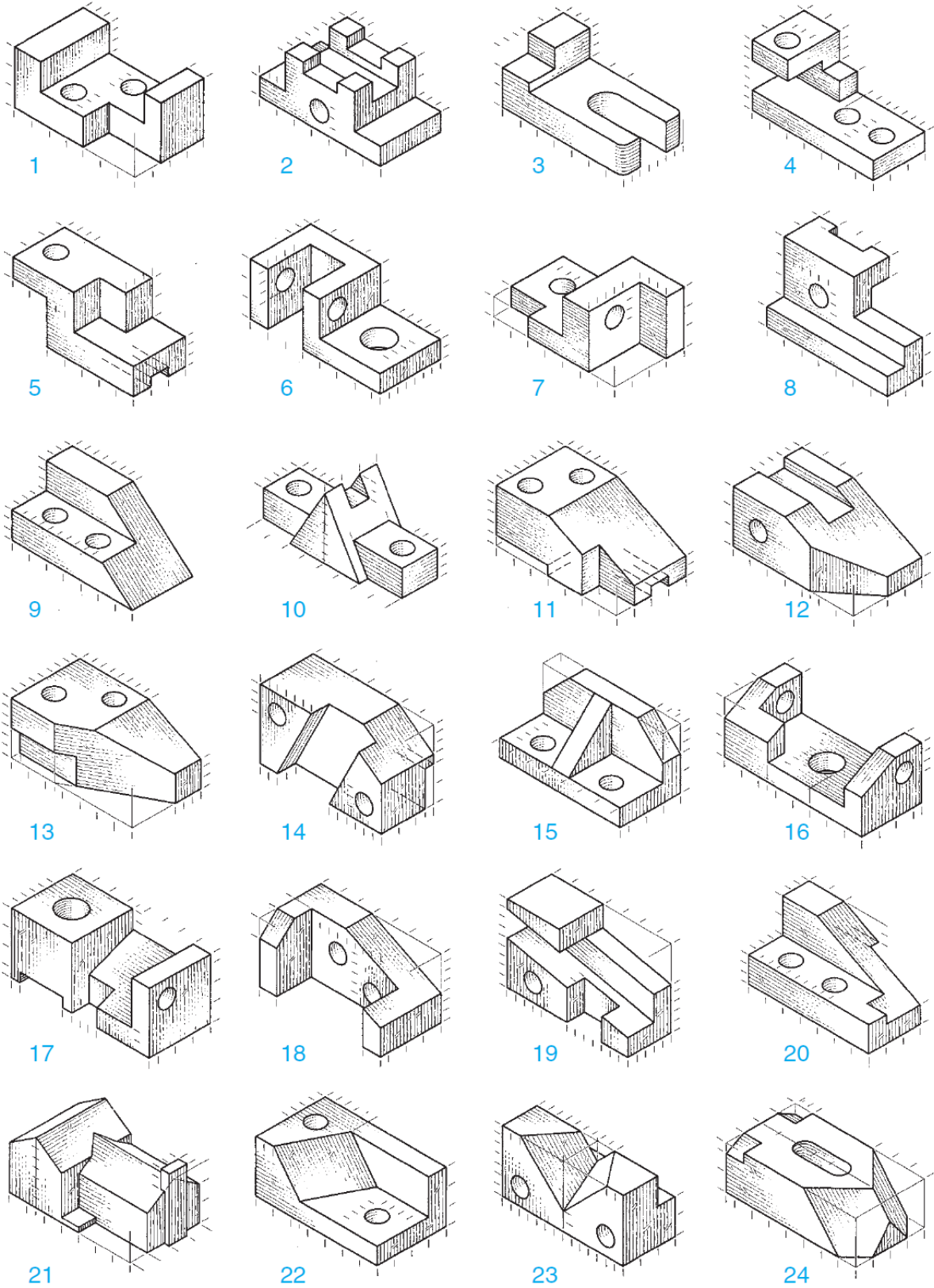
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Fig. 1. Tools needed to complete the project.

## 3 Description of the task

Sketch necessary orthographic views on a graph or plain paper, showing all required views and dimensions. Examples of orthographic views were given in lectures and laboratories.

This task is designed to fit on A4 paper. Units may be 10 mm and 5 mm. All holes are through holes. Models are shown in Fig. 2. Each student should work in pairs, and each pair should have a different model. The numbers will be reserved for the last lecture. If students do not reserve numbers, they will be encouraged to reserve them as soon as possible.



**Fig. 2. 3D models to draw.**

## 4 Borders and frames

Make sure the drawings have a frame. Most construction drawings should contain a border or margin around the edge of the sheet. This is created by using a very thick borderline. It helps prevent drafts from drawing right to the edge and might get lost while duplicating. The borders allow for binding. Borders enclosed by the edges of the trimmed sheet and the frame that limit the drawing space should be provided in all sizes. The border on the left edge should be larger than the center of the image to be used as a filing margin. Allowable borders in metric measurements are shown in Tab. 1.

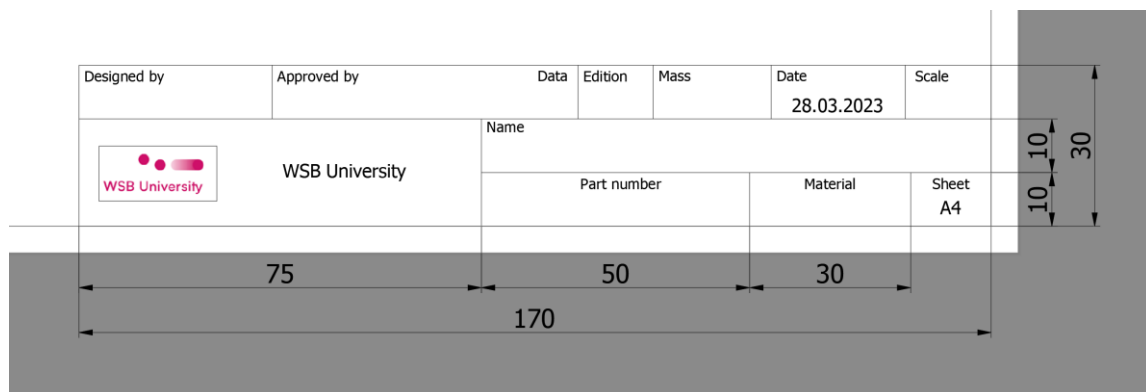
*Tab. 1. Paper sizes and borders.*

<u>Paper Size</u>	<u>Border Width (mm)</u>		<u>Dimension of Drawing Frame (mm)</u>	
	Left & Right	Top & Bottom	Width	Height
A0	28	20	1133	801
A1	20	14	801	566
A2	14	10	566	400
A3	10	7	400	283
A4	7	5	283	200

Table – 1 Borders and drawing frames.

## 5 Title block

Insert the title block in the bottom right corner. An example of this is shown in



*Fig. 3. Title block with dimensions.*

# 6 Project

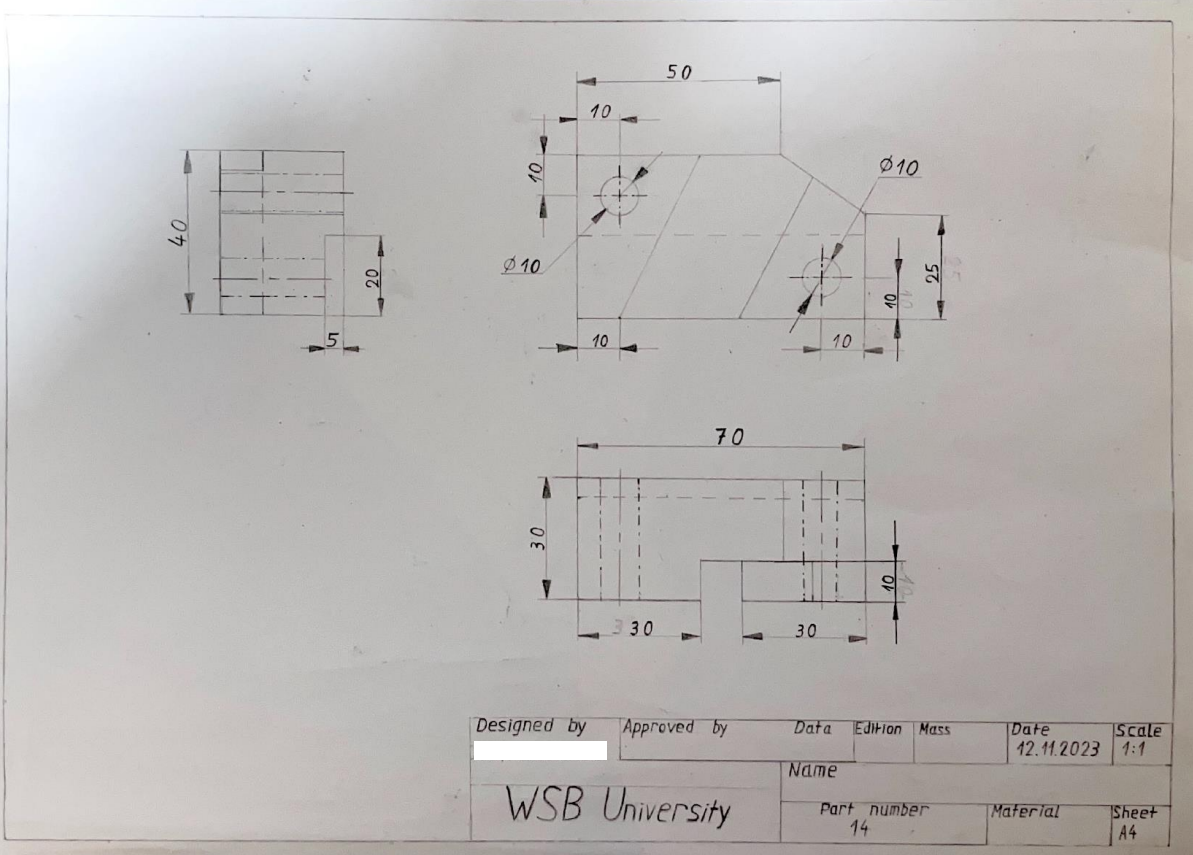


Fig. 4. Sample project.