

Board-Pencil Drawing Tools & Instruments

- T- Square
- 45° Set Square
- 30° x 60° Set Square
- Drawing Paper
- Case Instruments
- Pencils (B, HB, 2H)
- Circle Templates
- French Curves
- Eraser
- Protractor
- Schooth Tape



Board drafting equipment.

BOARD DRAFTING

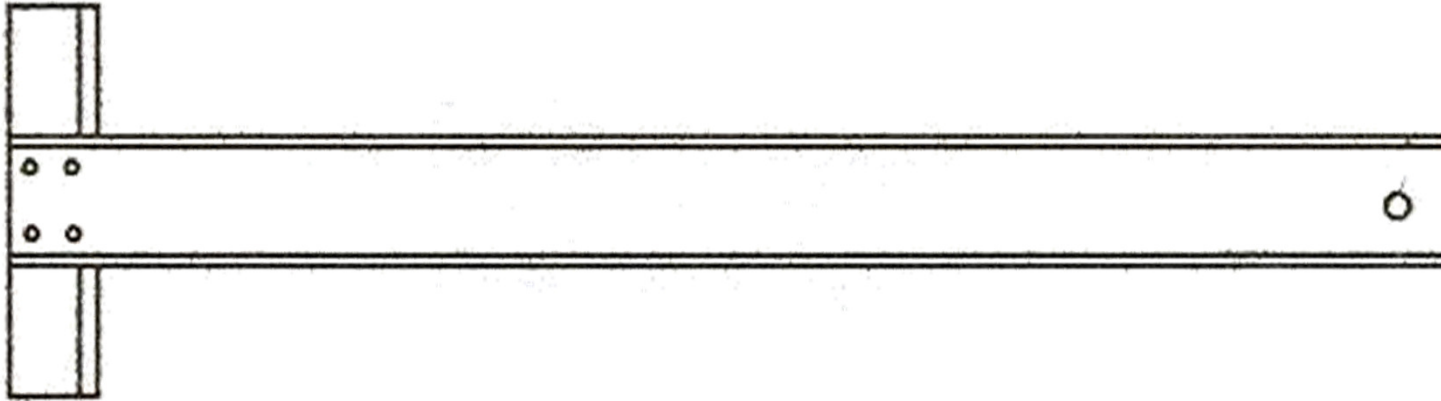
Over the years, the designer's chair and drafting table have evolved into a **drafting station** that provides a comfortable, integrated work area. Yet much of the equipment and supplies employed years ago are still in use today, although vastly improved.

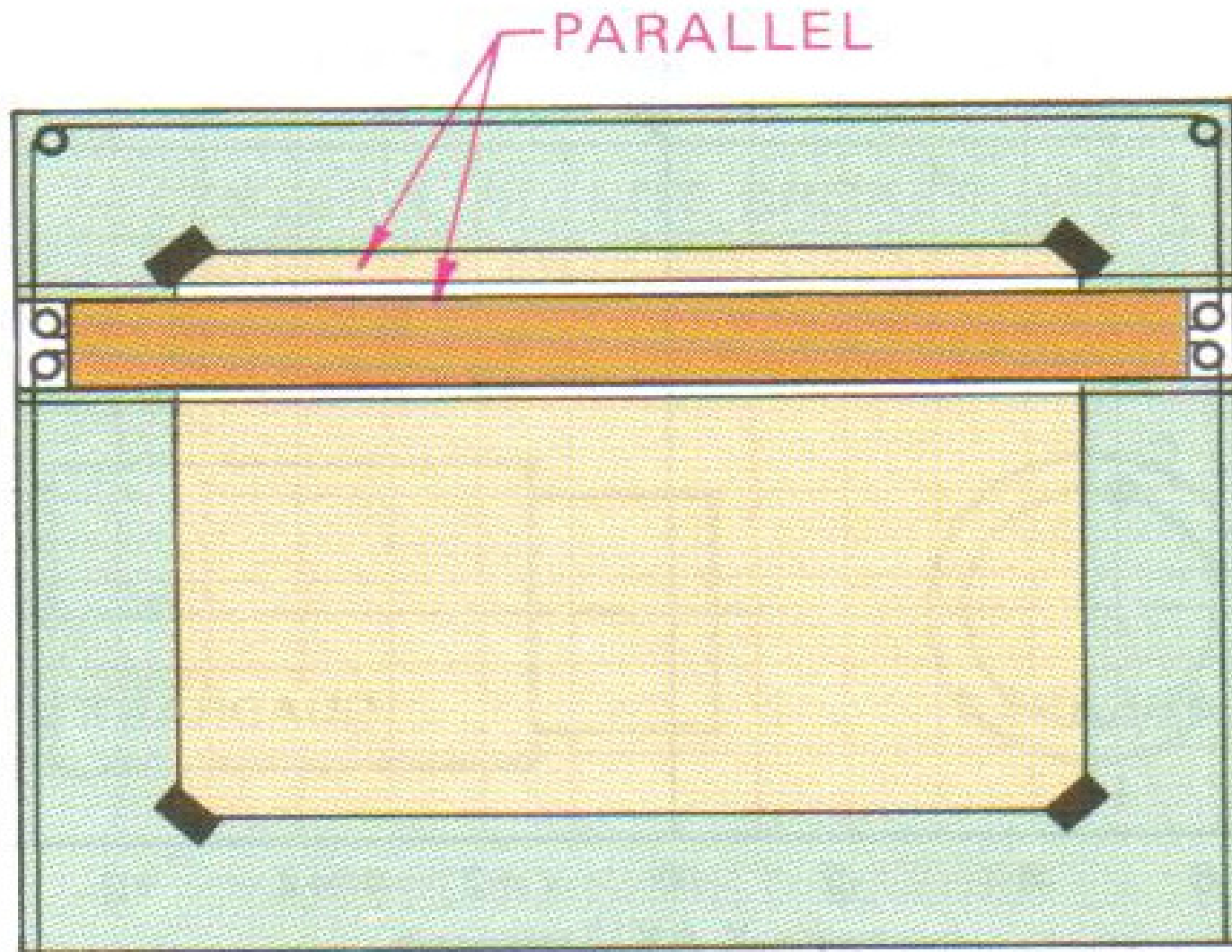


WOOD DRAFTING TABLE



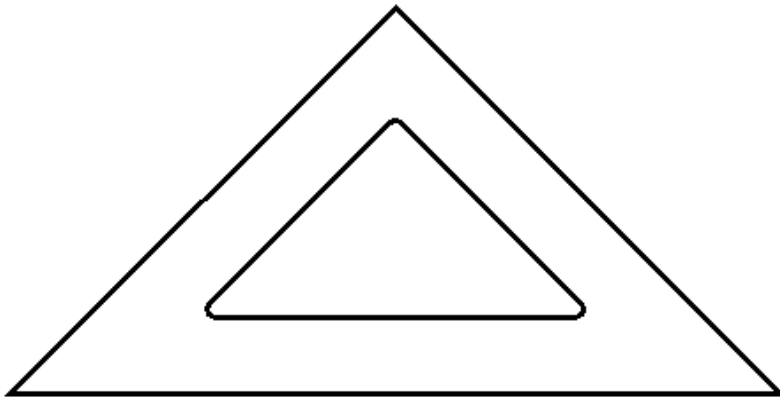
T Square



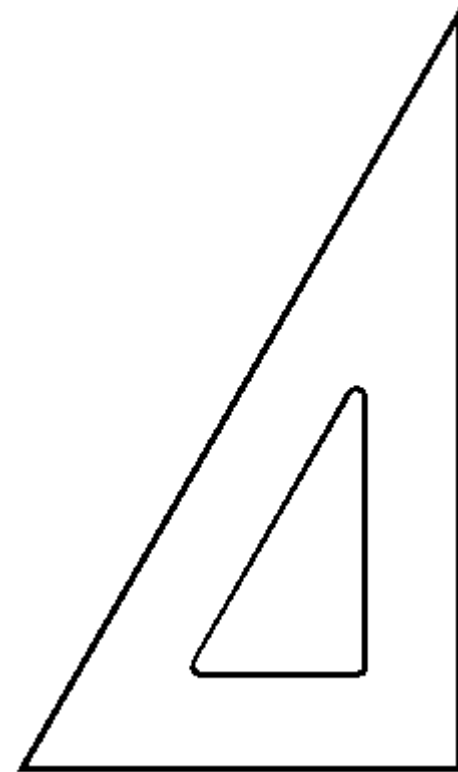


Positioning and fastening the paper on the board.

Drafting Equipment

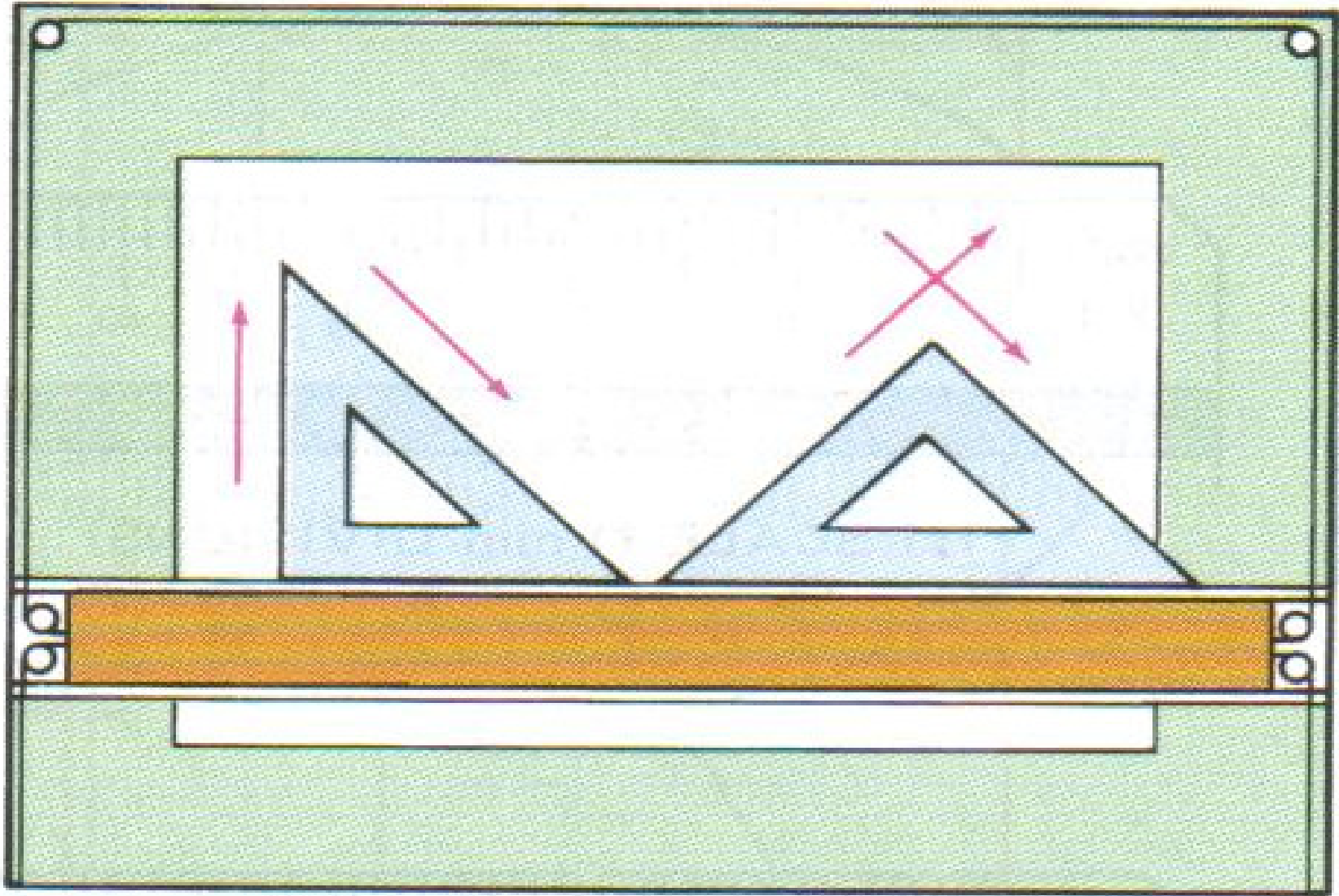


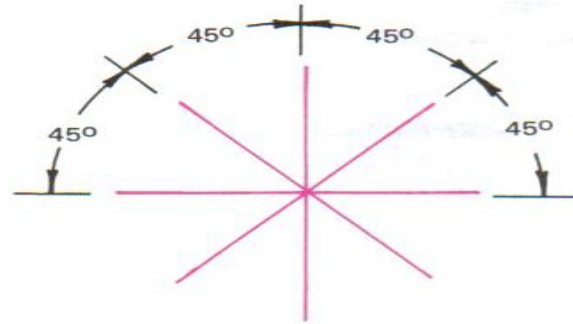
45°



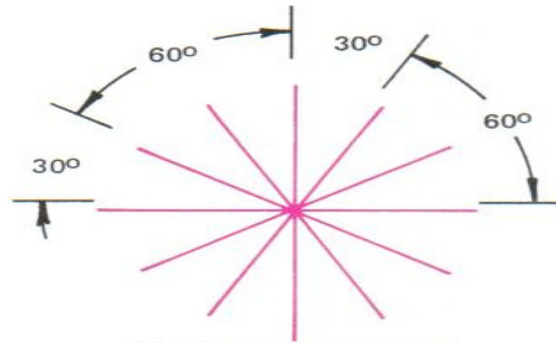
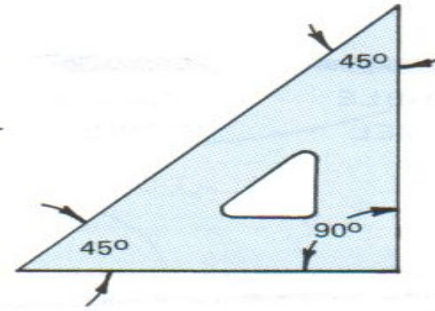
30°/60°

Triangles

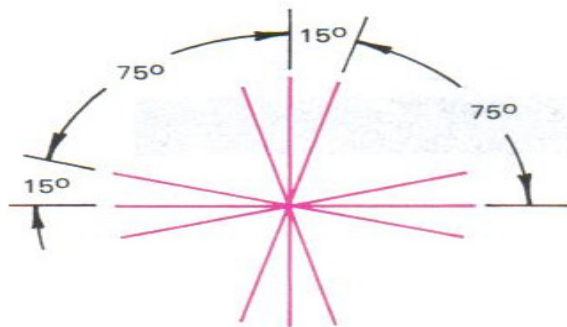
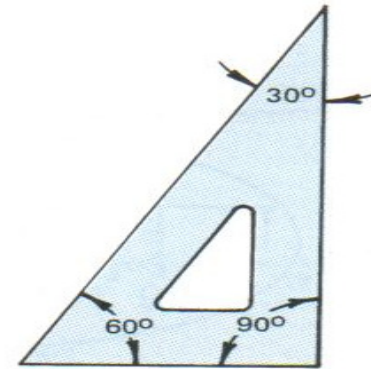




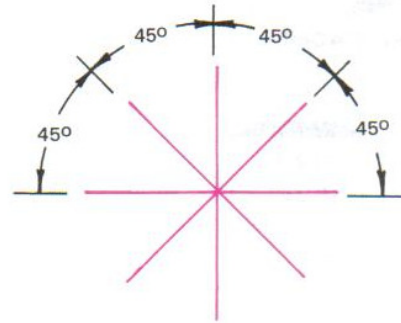
(A) THE 45° TRIANGLE



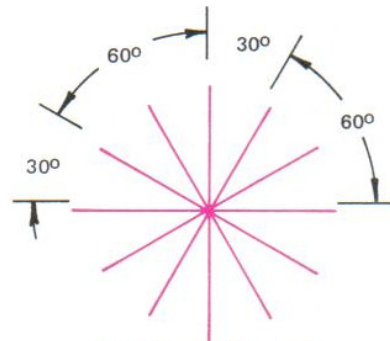
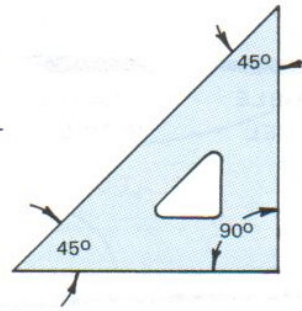
(B) THE 60° TRIANGLE



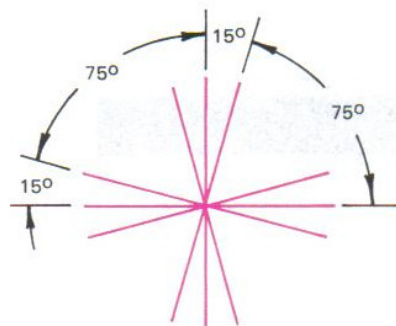
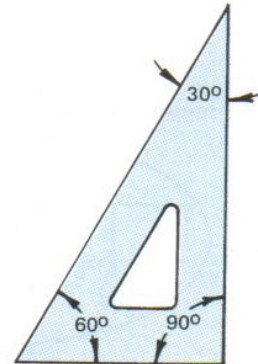
(C) THE TRIANGLES IN COMBINATION



(A) THE 45° TRIANGLE

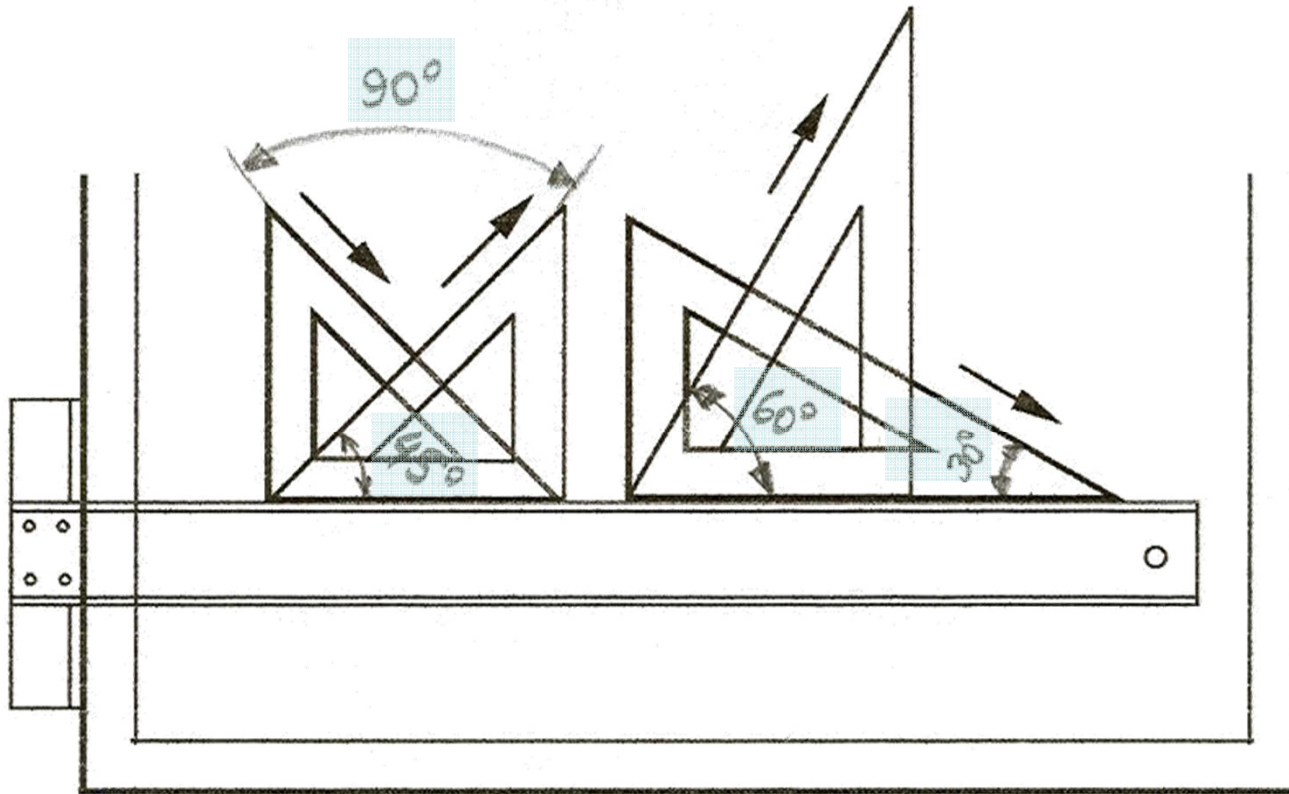


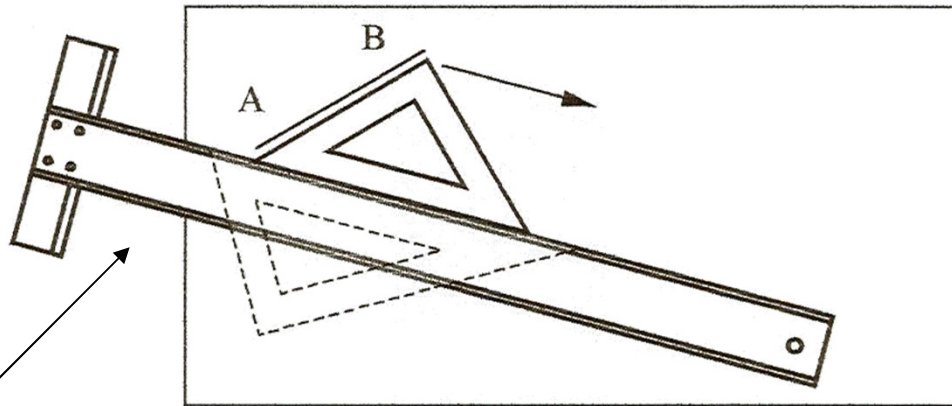
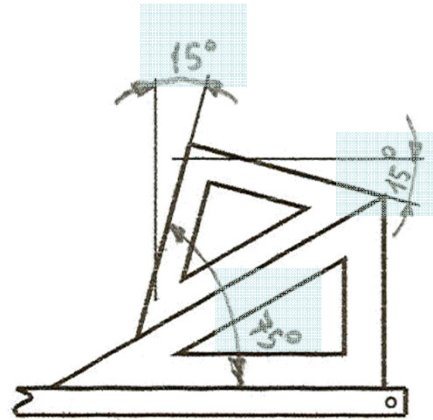
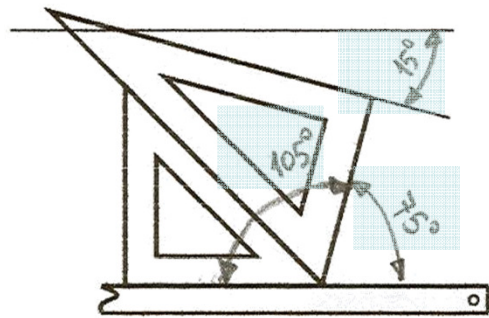
(B) THE 60° TRIANGLE



(C) THE TRIANGLES IN COMBINATION

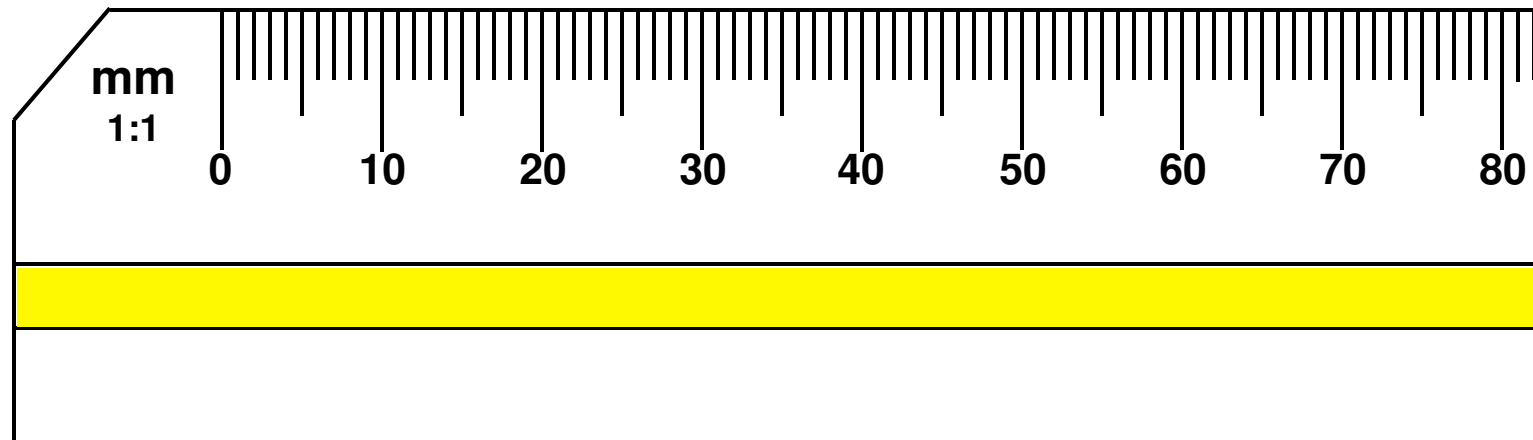
Set Squares





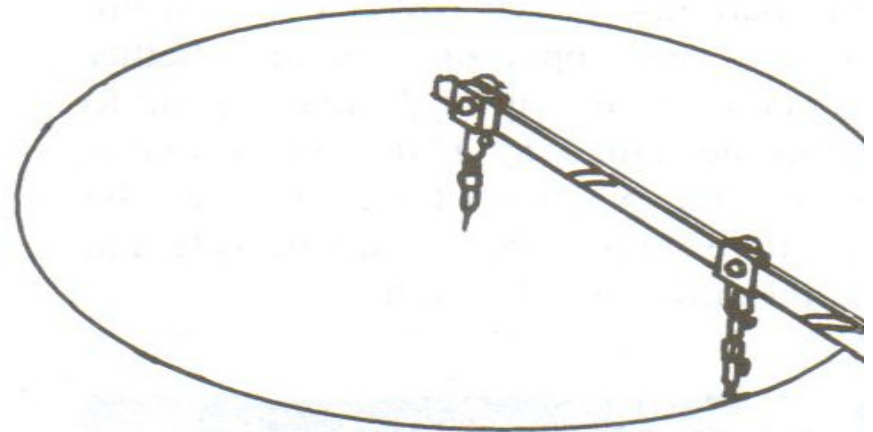
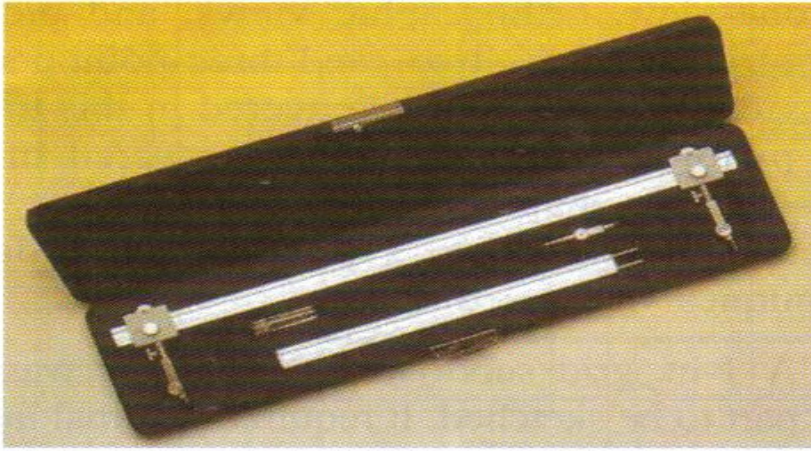
Wrong!

METRIC SCALE

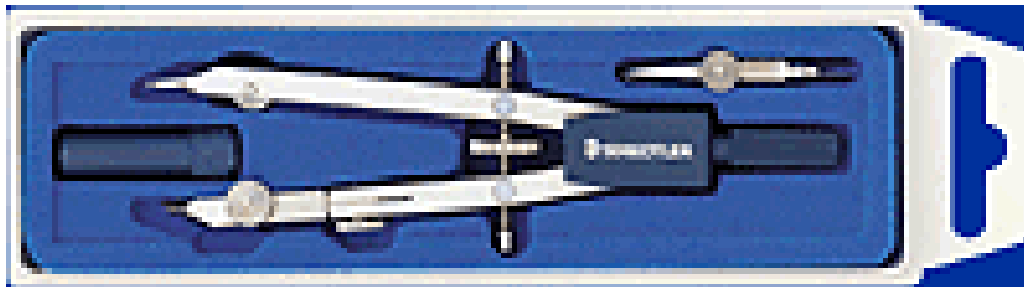


1:1 SCALE (1mm DIVISIONS)

Drafting Equipment

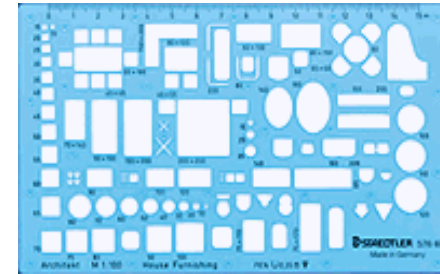
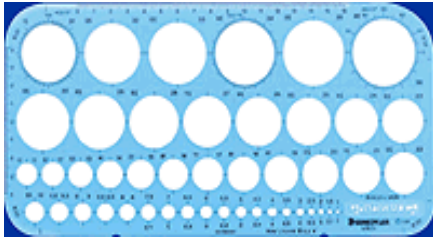


(A) BEAM COMPASS

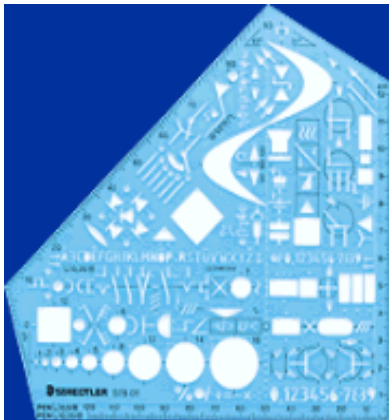


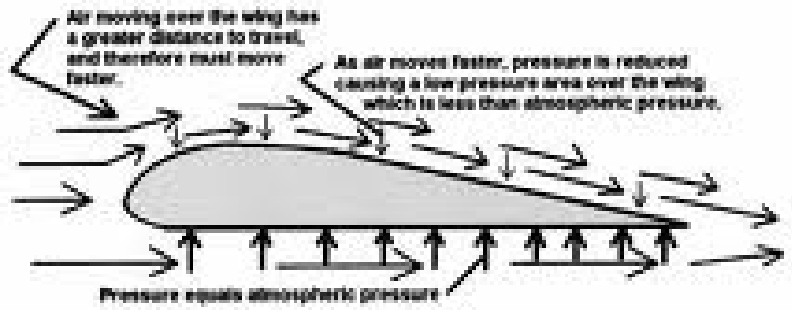
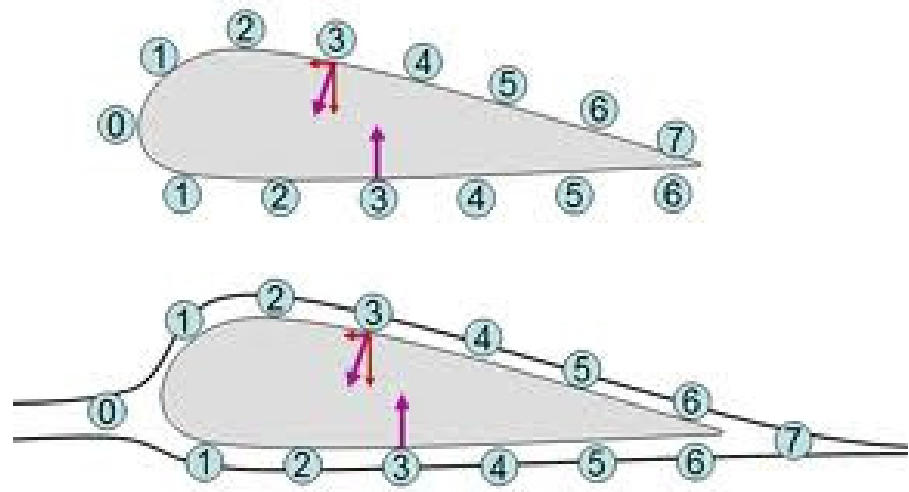
**Bow
Compasses**

Drafting Equipment

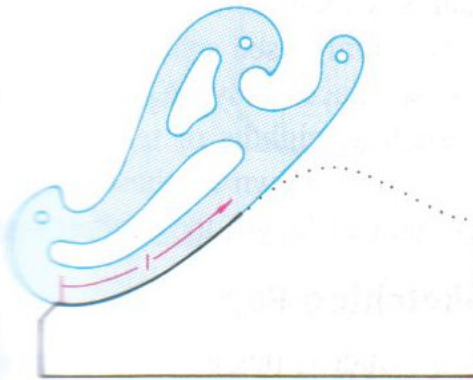
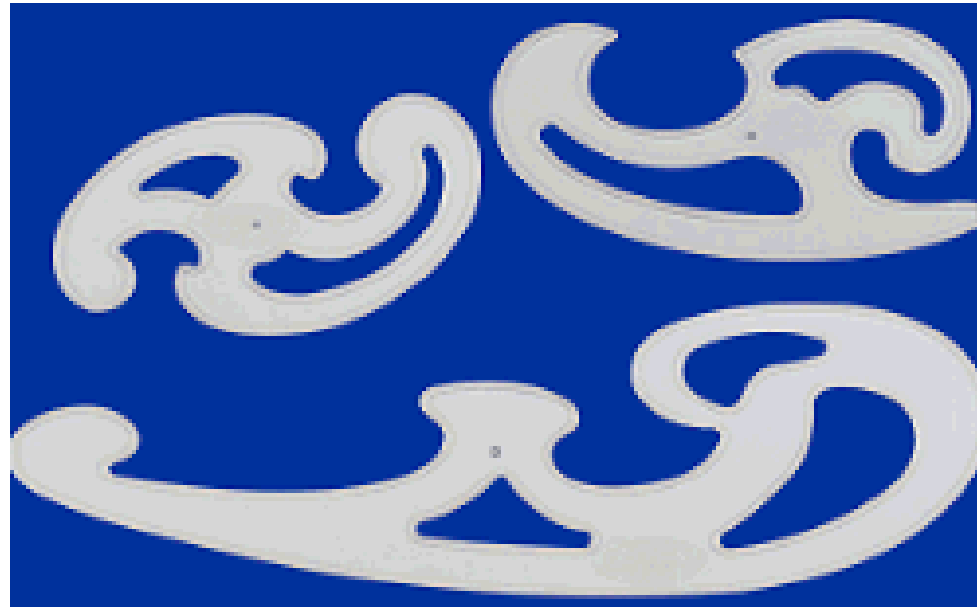


Templates



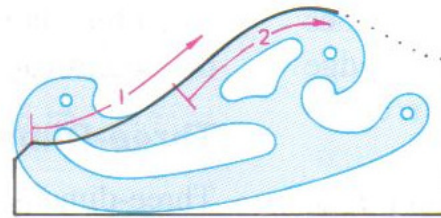


Drafting Equipment

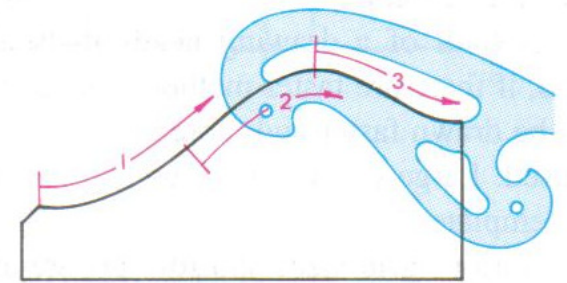


FIRST POSITION

Drawing a curved line.



SECOND POSITION



THIRD POSITION

Irregular Curves

Drafting Equipment



Wooden Pencil



Automatic Pencil



Mechanical Pencil

Drafting Equipment

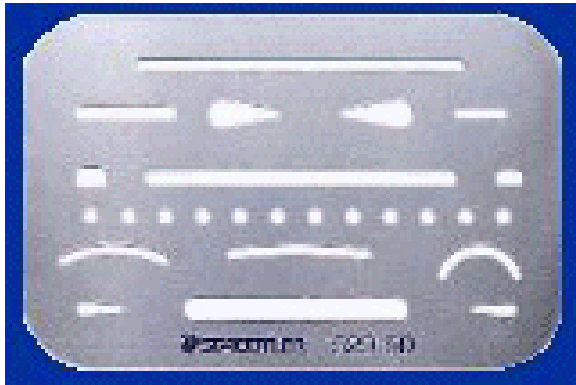


Erasers

Pencil Grades

9H, 8H, 7H, 6H, 5H, 4H	Hard	Used in drawing very thin and light lines, 9 or 8 H pencils suitable to draw over marble or stone
3H, 2H, H, F, HB, B	Medium	Used in medium sized paper drawing 3H, 2H, H for construction lines, F, HB, B for visible out lines, hidden lines and lettering
2B, 3B, 4B, 5B, 6B, 7B	Soft	Used in large sized paper drawing, especially in civil engineering and architecturing

Drafting Equipment



Erasing Shield



Drafter's Brush

Drafting Equipment



Technical Pens

Tools & Instruments in CAD

- Computer
- CAD Software
 - - AutoCAD,
 - - AutoCAD- Mechanical
 - -AutoCAD- Electrical
 - - AutoCAD- Architect
 - - AutoCAD- Civil 3D
 - - Autodesk Inventor
 - - Autodesk Revit