To Draw: to pull, to make, to delineate
Vitruvius: “drawing (disegno) is the father of our three arts, Architecture, Sculpture, and Painting
Vasari: “Drawing as an apparent expression, or a visible image of the thoughts of the mind (esprit) and of what one has formed first in the imagination.”
TRIANGULAR AND HEXAGONAL PRISMS

FIG. 1.

TOP VIEW

2'

2'

3'

4'

FRONT VIEW

SIDE VIEW

FIG. 2.

TOP VIEW

1 1/2

1 1/2

FRONT VIEW
SQUARE PYRAMID AND
CHIMNEY MODEL

TOP VIEW

2"

TOP VIEW

SECTION

FRONT VIEW

FRONT VIEW

TOP VIEW
SQUARE PRISM AND HOLLOW CYLINDER
Construction of Multi-View Drawings

A. Position of Plane
B. Top Part Removed
C. Plan of Remainder
D. Roof Plan
E. Framing Plan
F. Reflected Plan

Making a floor plan
Kinds of Plans
Constructing an Isometric Drawing

A. Isometric Axes
B. Isometric Projection
C. Isometric Drawing

Isometric Projection and Drawing

D. The Isometric Angles and Axes

E. Multi-view Drawings
F. Axes Located
G. Object Drawn

Making an Isometric Drawing

H. One Axis Vertical
I. One Axis Horizontal
J. Inclined
K. Positions of the Isometric Axes
Isometric Drawing

THE OFFSET METHOD

STEP-1

STEP-2

STEP-3

THE BOX METHOD

STEP-1

STEP-2

STEP-3

THE SECTION METHOD

LOOKING UP

LOOKING DOWN

HALF PLAN

Fig-14 ISOMETRIC CONSTRUCTION METHODS
1. Isometric drawing: All areas emphasised equally.

2. Dimetric drawing: Emphasised areas are shaded.

3. Oblique drawing: True shape areas emphasised and shaded.

Symmetrical

Unsymmetrical
4H
- This dense grade of lead is best suited for accurately marking and laying out light construction lines.
- The thin, light lines are difficult to read and reproduce and should therefore not be used for finish drawings.
- When applied with too much pressure, the dense lead can engrave paper and board surfaces, leaving grooves that are difficult to remove.

2H
- This medium-hard lead is also used for laying out drawings and is the densest grade of lead suitable for finish drawings.
- 2H lines do not erase easily if drawn with a heavy hand.

F and H
- These are general-purpose grades of lead suitable for layouts, finish drawings, and handlettering.

HB
- This relatively soft grade of lead is capable of dense linework and handlettering.
- HB lines erase and print well but tend to smear easily.
- Experience and good technique are required to control the quality of HB linework.

B
- This soft grade of lead is used for very dense linework and handlettering.
Heavy
• Heavy solid lines are used to delineate the profiles of plan and section cuts (see pages 42 and 58) as well as spatial edges (see page 81).
• H, F, HB, B
• Use a lead holder or draw a series of closely spaced lines with a 0.3 mm or 0.5 mm mechanical pencil; avoid using a 0.7 mm or 0.9 mm pencil for drawing heavy line weights.
• Pressing too hard to make a line means that you are using too hard of a lead.

Medium
• Mediumweight solid lines indicate the edges and intersections of planes.
• H, F, HB

Light
• Lightweight solid lines suggest a change in material, color, or texture, without a change in the form of an object.
• 2H, H, F

Very Light
• Very light solid lines are used to lay out drawings, establish organizing grids, and indicate surface textures.
• 4H, 2H, H, F