

Mechanical Drawing: Board & CAD Techniques

Chapter 5 Geometry for Drafting

Chapter Summaries

Section 5.1 Applied Geometry for Board Drafting

- Geometry is the study of the size and shape of objects and their relationship to each other.
- Drafters, surveyors, engineers, architects, scientists, mathematicians, and designers use geometric constructions to show proper relationships between individual lines and points.
- Geometric shapes discussed in this chapter include lines, triangles, squares, circles, arcs, angles, pentagons, hexagons, polygons.
- The most important principles of drafting include accuracy. Work that is not accurate may give designers wrong information.

Section 5.2 Applied Geometry for CAD Systems

- Using CAD object snaps for geometric constructions greatly increase the efficiency of the drawing process and reduces the time involved in preparing accurate, high-quality drawings.
- In CAD, many commands are available for drawing basic geometric shapes. Examples include CIRCLE, POLYGON, ARC, and ELLIPSE.