

Harnessing AutoCAD 2000

Chapter FOUR – Fundamentals III

Synopsis: AutoCAD 2000 provides numerous commands to help make drafting and design work more efficient. The drawing tools described in this chapter will assist the student in developing drawings quickly, easily and accurately.

Objectives: After completing this chapter, each student will be able to do the following:

- Draw construction lines using the XLINE and RAY commands
- Construct geometric figures with POLYGONS, ELLIPSEs, and POLYLINEs
- Create single line and multiline text using appropriate styles and sizes, to annotate drawings
- Use the construct commands: COPY, ARRAY, OFFSET, MIRROR, FILLET, and CHAMFER
- Use the modify commands MOVE, TRIM, BREAK, and EXTEND

Teaching Hints:

- XLINE and RAY give the user access to two powerful commands to aid in laying out large objects having multiple orthographic views.
- To avoid erasing, use the XLINE and RAY commands on a separate layer, which can be turned off prior to the plotting of the drawing.
- Give your students warning that spline fitting a polyline dramatically increases (almost 10 fold) the disk requirements for storing that polyline.
- The process of applying text is rather straightforward. The basic option that needs discussion is the “justification” of the text. Remember that the DTEXT command will always appear to place the text with normal left justification until the command is completed when ENTER is pressed at an empty text prompt.
- Editing commands can be considered in two categories; construct and modify. The *construct* commands create new objects while *modify* commands simply change the existing objects.