AutoCAD Help Sheet for MET 100

Function Keys
F1: goes to HELP screen
F2: toggles between full screen text and drawing space
F3: brings up OSnaps settings dialog box.
F6: turns coordinates at the top of screen on/off
F7: turns grid display on/off
F8: turns ortho on/off (ortho makes all further lines you draw horizontal or vertical)
F9: turns snap on/off (snap moves cross hairs to closest point in the snap grid)

Draw Menu
Lines: Basic lines can be drawn in three ways. (1) Select "Line" from the Draw menu and then click on the appropriate location on the drawing screen. To stop drawing continuous lines, click the right mouse button or hit Enter. (2) Click on the "Line" icon to the left of the drawing screen. (3) Type the word line in the text window. AutoCAD then asks for the "from point" and "to point" X,Y coordinates.

Circles: A circle is most commonly specified by a center and a radius. (Alternatives are 3 points on the circumference or 2 points at the ends of a diameter.) A circle can be drawn using a center and radius in three ways. (1) Select "Circle; center, radius" from the Draw menu and then click on the appropriate location on the drawing screen. (2) Click on the "Circle" icon to the left of the drawing screen. (3) Type circle in the text window and specify

Tools Menu
OSnaps: located under Assist/Object Snap on the pull-down menu, and the bottom of the icon menu.
  Endpoint: picks the end of the entity closest to the point picked.
  Center: picks the center of the circle picked
  Intersection: picks the intersection of two lines closest to the point picked.
  Perpendicular: makes the line being drawn to be perpendicular to the picked entity.

Drawing Aids: allows you to turn Snap, Snap Angle, Grid, and Ortho on, and to set the spacing on the Snap and Grid. Double clicking on the appropriate area on the status bar turns these drawing aids off and on.

UCS: The User Coordinate System icon at the lower left hand of the draw space can be turned off by the UCS menu or by typing UCSICON and answering OFF. Point of origin and angle of the UCS can also be changed through the keyboard, or using the mouse.

Format Menu
Layers: After typing in the layer names and picking new, you can click on the properties of the layers, such as color or line type, to pull up dialog boxes where the properties can be changed. Layers can be turned on or frozen so that they can't be seen. You can also
change from one layer to another by clicking on the layer name shown in the upper left hand corner, and picking another layer.

**Color, Linetype, Units** are also on the Format menu.

**Editing and Modify Menus**

Picking entities for editing can be done individually by clicking the entities or they can be done in a group. By dragging the mouse to the right, everything completely enclosed by the shown box will be picked. Dragging the mouse to the left will select all entities touched by or enclosed by the shown box. Entities can be deselected by holding down the shift key and picking the individual entities.

**Erase:** select individual entities or specify a window and point and drag the mouse to define the border, where everything completely enclosed in the window will be included.

**Move:** select the entities to be moved, and hit return, then pick a point from which the displacement will be measured.

**Copy:** like move, only a copy will be moved, not the original.

**Rotate:** select the entities, pick a point around which the objects will rotate, and specify an angle of rotation.

**Mirror:** select objects to be mirrored, then pick two points on the line about which the objects will be mirrored, and indicate whether or not to delete the original objects.

**Break:** select the object to be broken, then type "f" to indicate to make the next pick the first place to break pick a second point on the object, and the line in between will be gone.

**Trim:** select the objects that you want the line trimmed back to, hit return, then pick the end of the line that you want trimmed back.

**Extend:** like trim, but pick the end of the line you want to extend.

**Fillet:** First set the radius of the fillet by typing R after fillet. The default is 0, which forms a corner. Pick two non-parallel lines, the lines will extend to an intersection, and the fillet put in.

**Offset:** Creates an identical line to the picked object, parallel to it. First, enter the distance from the object that you want the duplicate. Next, pick the object to be duplicated, then the side of the object that the duplicate is to be placed.

**Display Controls Menu**

These commands change the look the draw screen.

**Redraw:** clears off "leftover" tick marks

**Zoom:** Allows you to look at a particular part of your drawing. The window option allows you to pick two corners of a window to define the area to be zoomed. The All option will display the whole drawing. The Previous option will display the last zoom.

**Miscellaneous**

**DText:** Shows the text on the screen as you write it. You can change the justification, letter height, and angle that the text enters at. Each line of text must be followed by a carriage return, and an extra carriage return at the end of the last line.
**Print/Plot:** Brings up a dialog box that allows you to choose paper size, plot scale, drawing view, and printer type. Set the preview to full, and click on preview to see if the parameters chosen really work.

**END:** Saves and quits out of the program. Never save immediately before ending. This can ruin your drawing. Either save then quit, or make a change in the drawing and then end.

**HELP:** On-line help is available for many commands.

**Unlock:** If the system locks your file. It is available under the Utilities menu, and is used if something goes wrong with AutoCAD and you are booted out of the program.

**Acadtidy:** If Unlock doesn’t work, exit out of AutoCAD, and type acadtidy at the F: prompt. This should remove unwanted and hidden files left by AutoCAD when it unexpectedly fails.