Chapter 1
Introduction
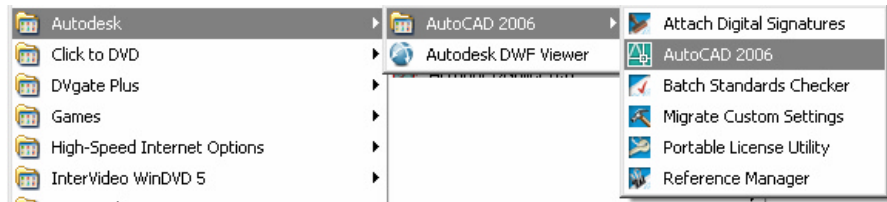
AutoCAD 2D Tutorial

1.1 Launching AutoCAD

1. **Choose**   Start from the Windows program manager.

2. **Choose**   Programs, Autodesk ,AutoCAD 2004.

3. **Click**   the AutoCAD 2004 for Windows icon.

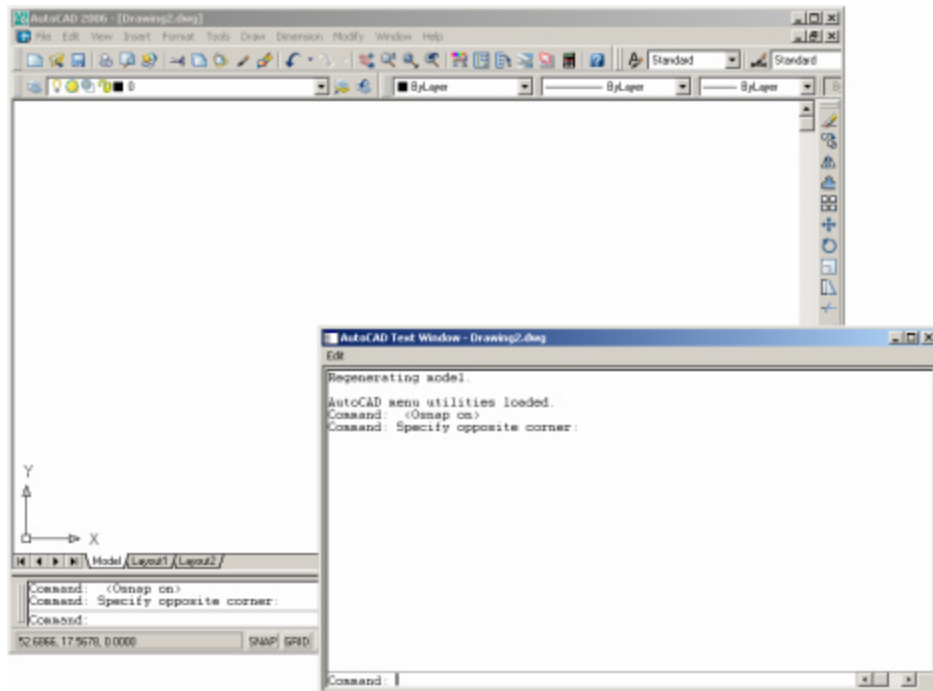4. **Choose**   the **AutoCAD 2004 icon** from the desktop.

1.2 Text and Graphics Screens

The graphics screen and the text screen are two different screens available in the drawing editor.

1. **Press** Function key **F2** on the keyboard.

 TIPS:

Be sure the Model Tab is highlighted at the bottom of the drawing window. "Layouts" will be covered in a later session.

The Cursor must be in the drawing window in order to select objects.

Maximize the AutoCAD windows to be full screen. This will make the drawings bigger and easier to read.

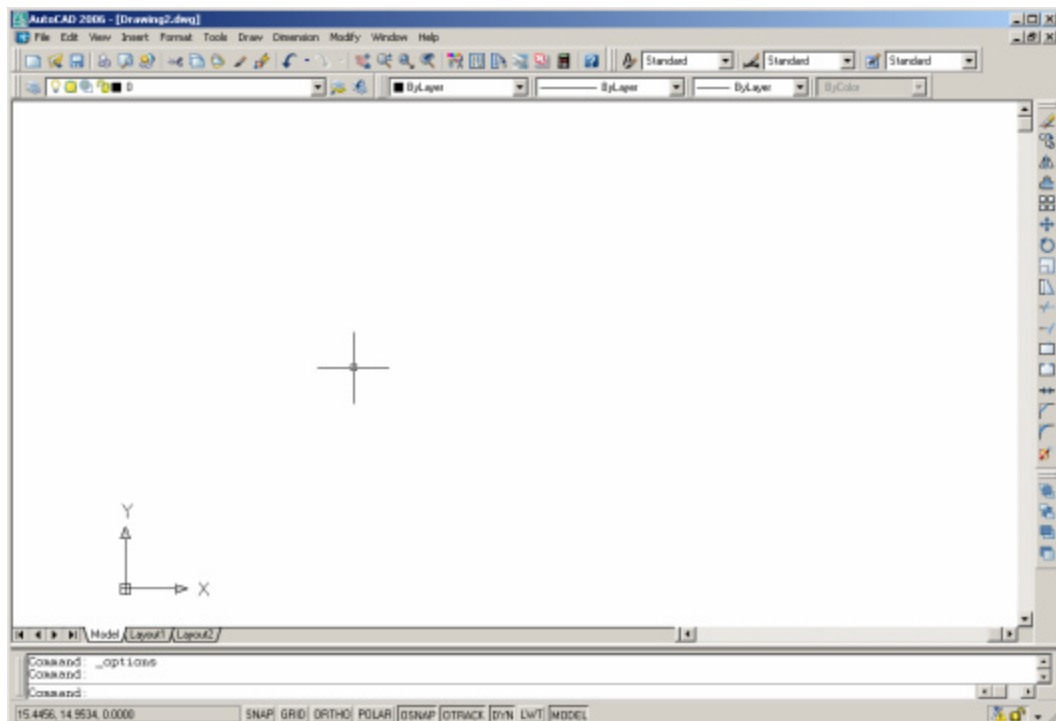Use ALT + TAB to move between Windows applications.

1.3 Cursor

Controls the size of the crosshair. The allowable range is from 1 to 100 percent of the total screen. At 100% the ends of the crosshair are never visible. When the size is decreased to 99% or below, the crosshairs have a finite size, and the crosshairs' ends are visible when moved to the edge of the graphics area. The default size is 5%.

1. **Choose**   Tools, Options…
2. **Click**   the Display TAB.
3. **Drag**   the slider bar in the lower left corner of the dialog to set the cursor size.

1.4 Canceling a Command

1.   Press the **ESCAPE (ESC)** key on the keyboard.

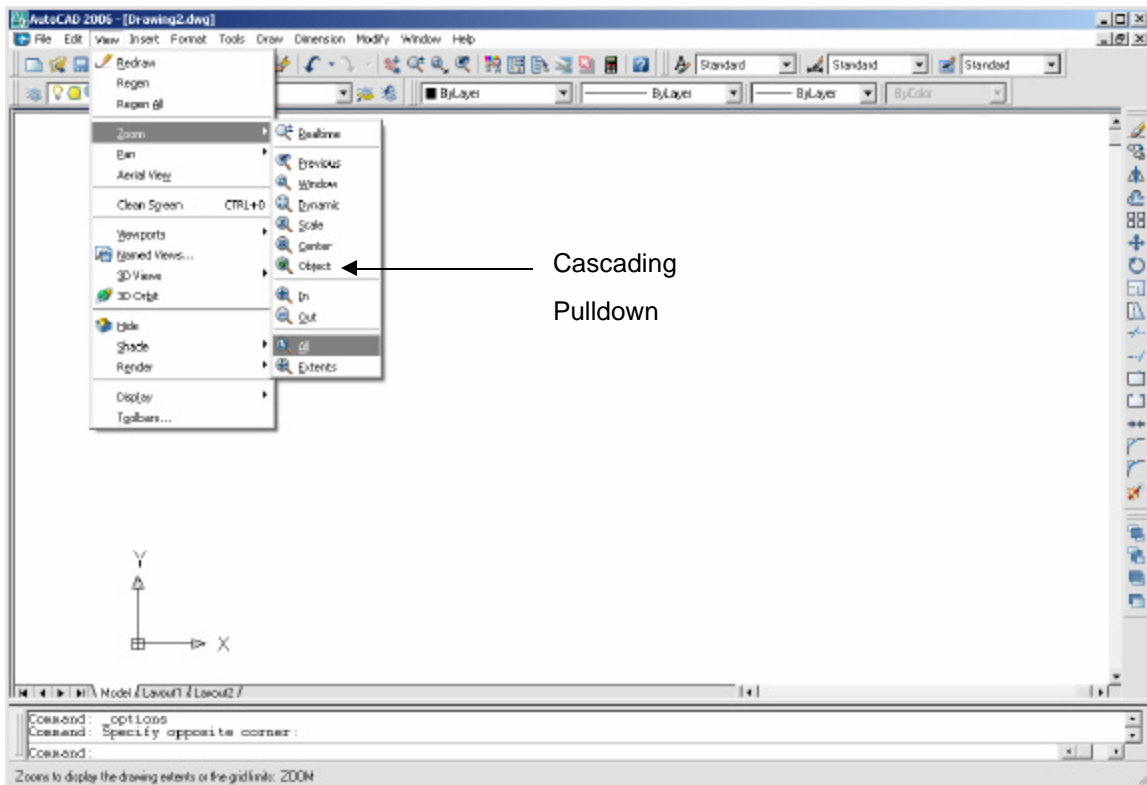**TIP: Pressing   ESC   twice   clears   nested   commands.**

1.5 Menus and Colors

Pulldown Menus

1. **Click**   On the desired Pulldown menu.

2. **Click**   On the command to be executed from the pulldown.

Cascading Pulldown Menus

1. **Click**   On a command that has a cascading menu
(menus with an arrow to the right of the menu)

2. **Click**   On the command to be executed.
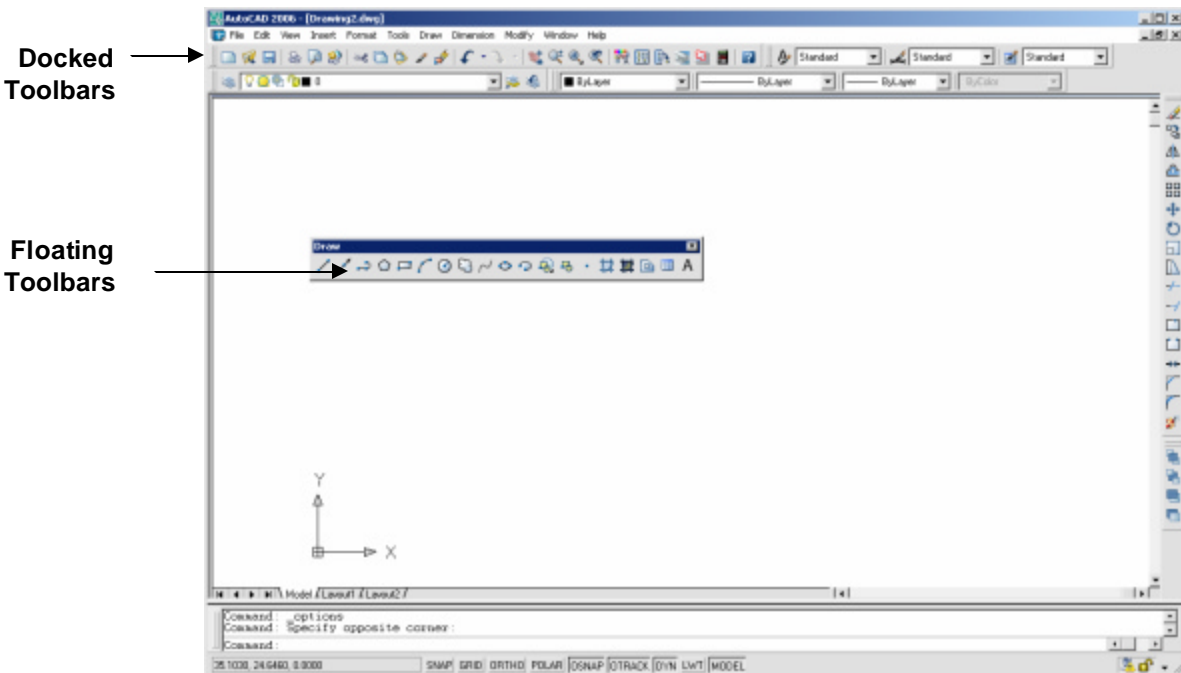

Cascading

Pulldown

1.6 Toolbars

Toolbars can be docked on the screen or they can float about the screen.

To Float a Toolbar:

1. **Choose**   the gray border surrounding each tool.
2. **Drag**   the toolbar to any area on the screen.

To Dock a Toolbar:

1. **Choose**   the title or gray border of the toolbar.
2. **Drag**   the toolbar to the top, bottom, left, or right area of the graphics display.

Docked Toolbars →

Floating Toolbars →

TIPS:

-Holding the CTRL key while dragging will prevent docking.

-Toolbars are often a faster way of accessing a command.

-Clicking on an icon with the right mouse button will show a list of all available toolbars.
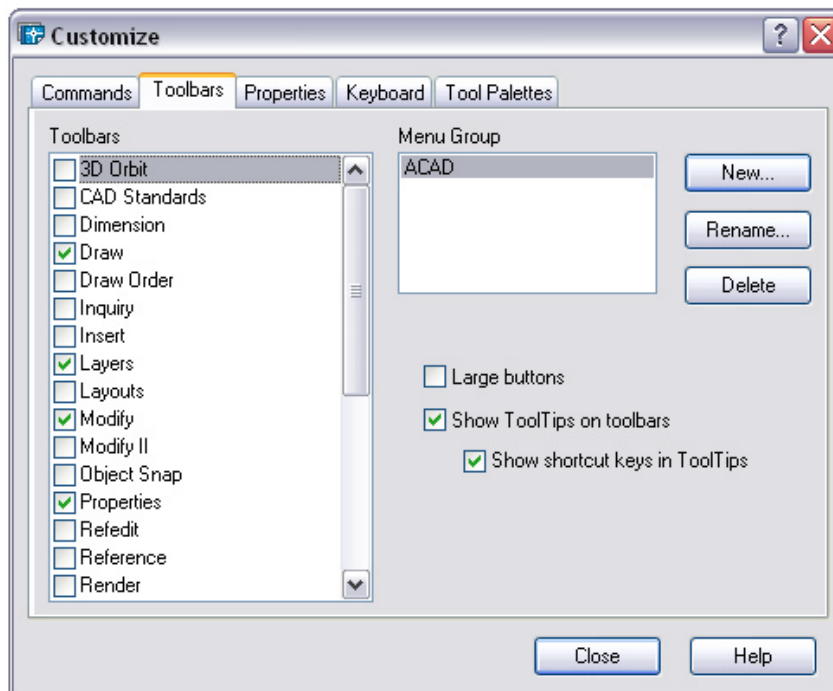
Help Tooltips

1.   **Move**   The mouse to the toolbar but do not pick the button.

Loading Toolbars

1.   **Choose**   View, Toolbar...

                        or

2.   **Type**   TOOLBAR at the command prompt

                        Command: **TOOLBAR**
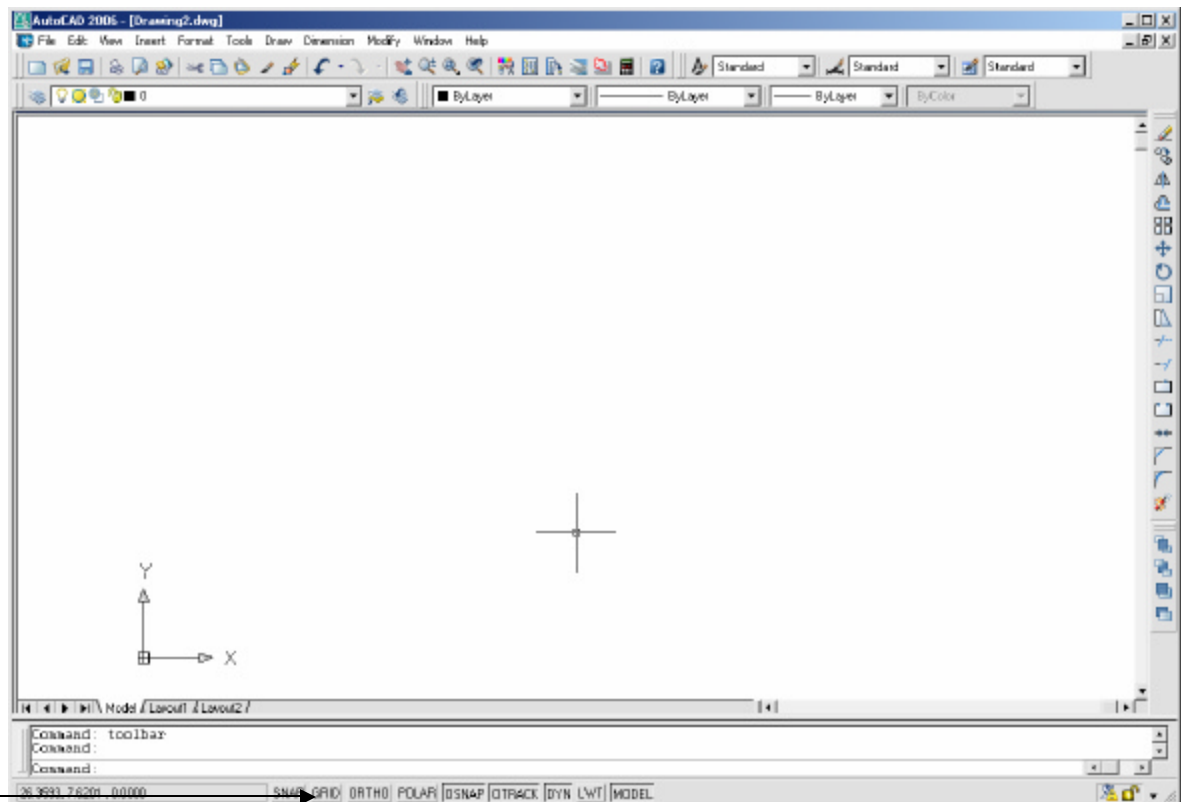
3.   **Choose**   the desired toolbar to load.
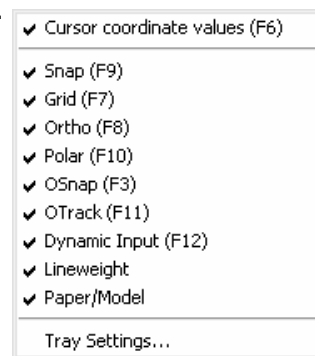
1.7 Status Bar and Command Prompt

The Status Bar is the area below the command line that shows messages as well as coordinates, modes, and the current time.

To activate SNAP, GRID, ORTHO, OSNAP, MSPACE, PSPACE, and TILE, you must double-click on the mode to change.

Status Bar

TIP:

• Right click on the status bar to see the options.

1.8 Typings Command - Aliases

Typing a Command

All AutoCAD commands can be typed in at the command line. Many commands also have one or two letter aliases that can also be typed as shortcuts to the commands.

1. **Type**　　the desired command at the command prompt.

　　　　　　　Command : **LINE**

　　　　　　　　　　or

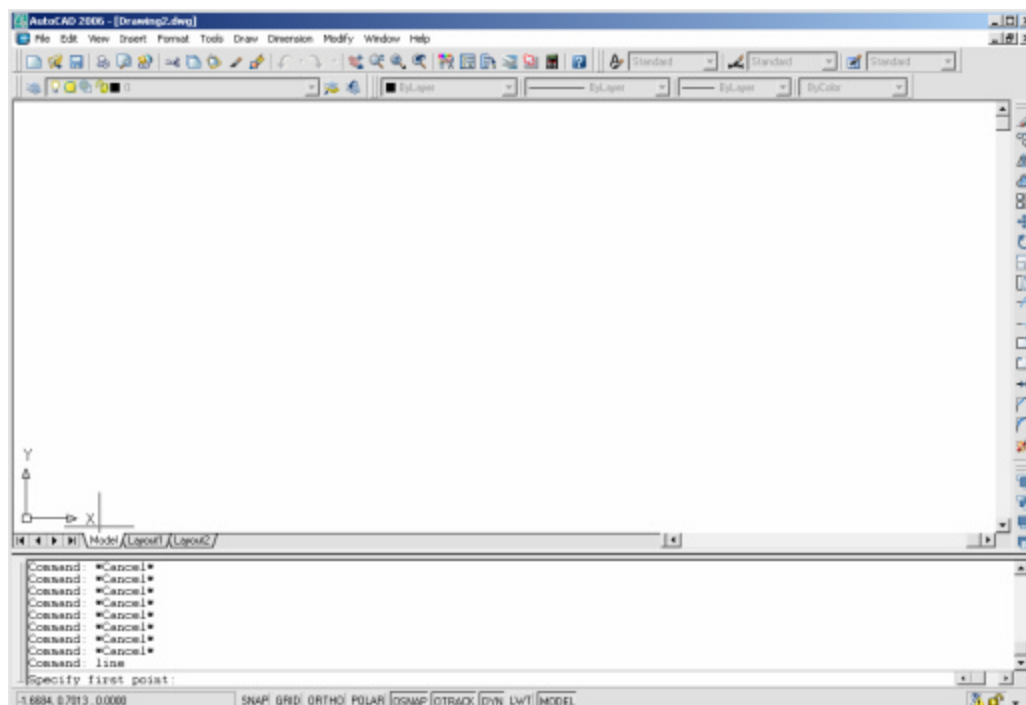2. **Type**　　the　　　　　　command's　　　　　alias.
　　　　　　　Command: **L**

3. **Press**　　**ENTER**.

4. **Type**　　an option at the command prompt.

TIP:

Many AutoCAD commands require you to press ENTER to complete the command. You know you are no longer in an AutoCAD command when you see a blank command line.

Command

Prompt

Tip : Reissuing the Last Command

The last used AutoCAD command can be re-entered by one of the following three methods of ENTER. The ENTER key on the keyboard will always act as ENTER, the SPACEBAR and RIGHT MOUSE will act as enter most of the time (exceptions include placing TEXT).

1. **Press**   the ENTER key on the keyboard

                        or

2. **Press**   the Space bar on the keyboard.

                        or

3. **Click**   the right mouse button.

1.9 Pointing Device (Mouse)

AutoCAD uses either a mouse or digitizing tablet to select objects in a drawing.
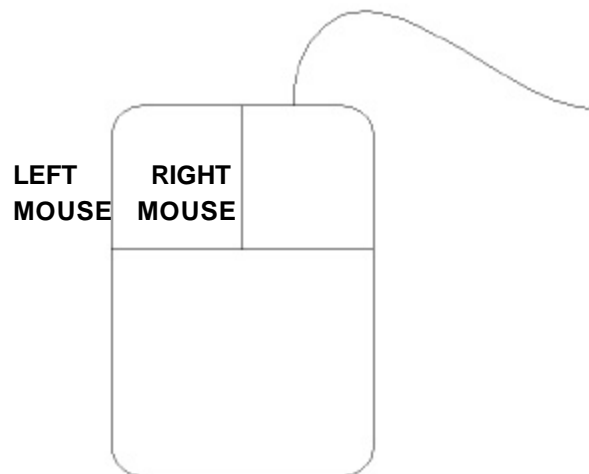
Left Mouse Button

Used to pick or select objects

1. **Click**   the left mouse button to select an object area in the drawing.
2. **Press**   ESC twice to deselect an object (or to cancel a command).

Right Mouse Button

Used to enter a command, repeat last command, or access shortcut menus.

1. **Click**   the right mouse button.

TIPS:

- SHIFT + the right mouse button brings up the object snap menus.
- Various screen locations for the mouse brings up different menus.

1.10 Undo and Redo

Reverses the last action.

1. **Choose**   Edit, Undo.

                        or

2. **Click**   the Undo icon.

                        or

3. **Press**   CTRL + Z.

4. **Type**   U at the command prompt to undo the last command.

               Command: **U**

Redo

Reverses the effects of a single UNDO or U command.

1. **Choose**   Edit, Redo.

                        or

2. **Click**   the Redo icon.

                        or

3. **Type**   REDO at the command prompt to redo the last undo command.

               Command: **REDO**

TIPS:

-UNDO has no effect on some commands and system variables, including those that open, close, or save a window or a drawing, display information, change the graphics display, regenerate the drawing, or export the drawing in a different format.

-REDO must immediately follow the U or UNDO command.

1.11 Function and Accelerator Keys

F1   Online Help

F2   Flipscreen

F3   Osnap ON/OFF

F4   Tablet On/Off

F5   Isoplane Toggle

F6   Coords On/Off

F7   Grid On/Off

F8   Ortho On/Off

F9   Snap On/Off

F10   Polar On/Off

F11   Object Snap Tracking ON/OFF

Press   **CTRL + A** to turn GROUPS on/off.

Press   **CTRL + B** to turn SNAP on/off.

Press   **CTRL + C** to COPYCLIP

Press   **CTRL + D** to turn COORDS on/off.

Press   **CTRL +E** to Toggle Isoplane settings.

Press   **CTRL +F** to turn Osnaps ON/OFF

Press   **CTRL + G** to turn GRID on/off.

Press   **CRTL + K** for Hyperlinks

Press   **CTRL + L** to turn ORTHO ON/OFF

Press   **CTRL + N** to create a NEW drawing.*

Press   **CTRL + O** to OPEN an existing drawing.*

Press   **CTRL + P** to PLOT a drawing.*

Press   **CTRL + S** to qsave a drawing.*

Press   **CTRL + T** to turn the digitizing tablet on/off.

Press   **CTRL + X** to cut to Clipboard.*

Press   CTRL + Z to UNDO

1.12 On-Line Help

1. Choose   Help, AutoCAD Help.

   or

2. **Click**   the Help icon. ?

   or

3. **Type**   HELP at the command prompt

   Command: **HELP**

   or

4. **Press**   Function Key **F1**