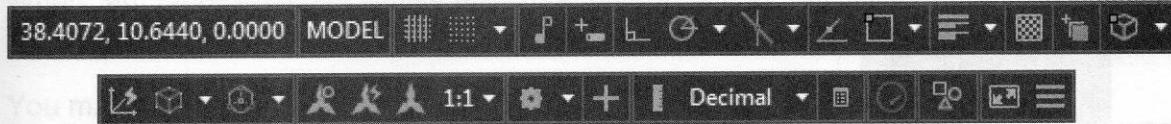


APPLICATION WINDOW DESCRIPTIONS....continued

STATUS BAR TOOL BUTTON DESCRIPTIONS

I have enabled all the tool buttons and broken them down into two sections starting from the left-hand side.



X Y Z

33.5921, 10.2480, 0.0000

COORDINATES

The coordinates display the location of the cursor in reference to the Origin. The Origin is currently in the lower left corner of the drawing area. These numbers will change as you move the cursor.

First set of numbers represents the horizontal movement of the cursor (**X-axis**).

Second set of numbers represents the vertical movement of the cursor (**Y-axis**).

Third set of numbers represents the **Z-axis** which is used for 3D and not discussed.

MODEL

MODEL

The **MODEL / PAPER** button allows you to work in either model space or paper space without leaving the layout tab. When you switch to a layout tab this button automatically switches to **PAPER**.

GRID



(You may also use **F7** to toggle ON or OFF)

The criss-cross lines in the Drawing Area are called the Grid. It is only a drawing aid and will not print. The default spacing is 1 unit of measurement. You may change the Grid spacing at any time by typing **DS** then press **<enter>**, then select the **Snap and Grid** tab from the **Drafting Settings** dialog box.

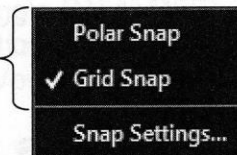
SNAP MODE



(You may also use **F9** to toggle ON or OFF)

Increment Snap controls the incremental movement of the cursor. If it is **ON** the cursor will “snap” in an incremental movement. If it is **OFF** the cursor will move smoothly. You may set the increments by clicking on the down ▼ arrow and selecting **Snap Settings**.

You can also choose whether to use **Grid Snap** or **Polar Snap** on the same menu.



INFER CONSTRAINTS





(Note: Not used in this workbook)


Inferred Geometric Constraints automatically applies coincident constraints for Endpoint, Midpoint, Center, Node, and Insertion object snaps.

APPLICATION WINDOW DESCRIPTIONS....continued

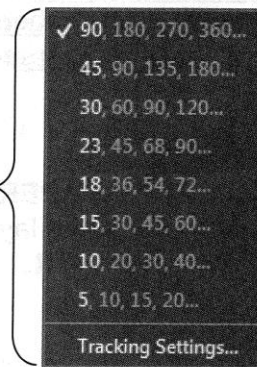
STATUS BAR TOOL BUTTON DESCRIPTIONS....CONTINUED


DYNAMIC INPUT  (You may also use **F12** to toggle ON or OFF)
 When **Dynamic Input** is **ON**, you can enter coordinate values in tooltips near the cursor. More on this in Lesson 11.

ORTHO MODE  (You may also use **F8** to toggle ON or OFF)
 Ortho restricts the movement of the cursor to Horizontal or Vertical. When Ortho is **ON** the cursor moves only in the horizontally or vertically. When Ortho is **OFF** the cursor moves freely in any direction.

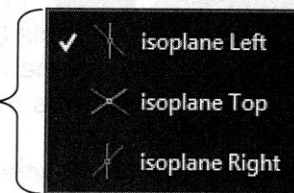
POLAR TRACKING  (You may also use **F10** to toggle ON or OFF)
 Polar Tracking restricts cursor movement to specified increments along a polar angle. More on this in Lesson 11.


You may set the increments by clicking on the down ▼ arrow and selecting **Tracking Settings**, or you can select one of the predefined angles from the list.



ISOMETRIC DRAFTING  Isometric drawing allows you to simulate a 3D object by aligning along 3 axes, these are **Top**, **Right** and **Left**, called **Isoplanes**. When the button is enabled you can toggle the Isoplanes by pressing the **F5** key. Isometric Drafting is discussed in the Advanced AutoCAD Workbook.

You may also change Isoplanes by clicking the down ▼ arrow and selecting from the menu.



OBJECT SNAP TRACKING  (You may also use **F11** to toggle ON or OFF)
 Object Snap Tracking controls the display of object snap reference lines, AutoSnap marker, tooltip and magnet.

APPLICATION WINDOW DESCRIPTIONS....continued

STATUS BAR TOOL BUTTON DESCRIPTIONS....CONTINUED

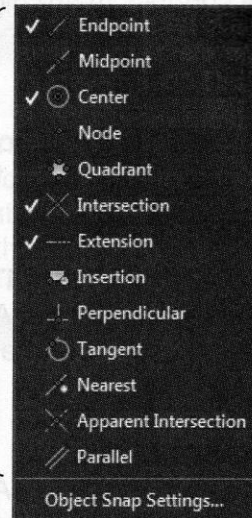
2D OBJECT SNAP



(You may also use **F3** to toggle ON or OFF)

When 2D Object Snap is **ON** the cursor will “snap” to preset locations on 2D objects. More on this in Lesson 4.

You may also add or remove Object Snaps by clicking the down ▼ arrow and selecting from the menu.



LINEWEIGHT



Lineweight displays the width assigned to each object. When it is **ON** the lineweights are visible. You can change the lineweight settings by clicking on the down ▼ arrow and selecting **Lineweight Settings**. More on this in Lesson 3.

TRANSPARENCY



When Transparency Show/Hide is **ON** all transparent layers will be displayed. If it is **OFF** no layers will display as transparent. More on this in Lesson 3.

SELECTION CYCLING



Selection Cycling allows you to select objects that are overlapping. This is most useful when creating 3 dimensional models discussed in the Advanced AutoCAD Workbook.

3D OBJECT SNAP



(You may also use **F4** to toggle ON or OFF)

When 3DOsnap is **ON** the cursor will “snap” to preset locations on 3D objects. This option will be discussed in the “Advanced AutoCAD Workbook”.

DYNAMIC UCS



(You may also use **F6** to toggle ON or OFF)

Dynamic User Coordinate System changes the grid plane to follow the XY plane of the dynamic UCS. Used for 3D, refer to the Advanced AutoCAD Workbook.

APPLICATION WINDOW DESCRIPTIONS....continued

STATUS BAR TOOL BUTTON DESCRIPTIONS....CONTINUED

SELECTION FILTERING

Selection filtering allows you to filter whether certain faces, edges, vertices or solid history subobjects are highlighted when you roll over them, very useful in complex 3D.

GIZMO

Gizmo tools help you move, rotate, or scale an object or set of objects along a 3D Plane, and discussed in the Advanced AutoCAD Workbook.

ANNOTATION VISIBILITY

When switched **ON** the Annotation Visibility tool displays or hides the visibility of annotation objects at the current scale.

AUTOSCALE

When switched **ON** the AutoScale tool Automatically updates annotative objects to support the annotation scale when the annotation scale is changed.

ANNOTATION SCALE

The Annotation Scale tool displays the current annotation scale. You can change the scale by clicking on the down ▼ arrow and selecting from the list of predefined scales or you may create a custom scale. You can also display the scale in percentages by selecting **Percentages** from the list.

WORKSPACE SWITCHING

Workspace Switching allows you to change the workspace environment, you can choose between “Drafting & Annotation”, 3D Basics and 3D Modeling. You can change the Workspace by clicking on the down ▼ arrow and selecting from the list.

ANNOTATION MONITOR

Provides feedback regarding the state of associative annotations when using parametric dimensioning. This option is discussed in the “Advanced AutoCAD Workbook”.

UNITS

The Units tool allows you to change the display style of the Drawing Units. You can choose between Decimal, Architectural, Engineering, Fractional and Scientific. You can change the drawing unit display by clicking on the down ▼ arrow and selecting from the list.

APPLICATION WINDOW DESCRIPTIONS....continued

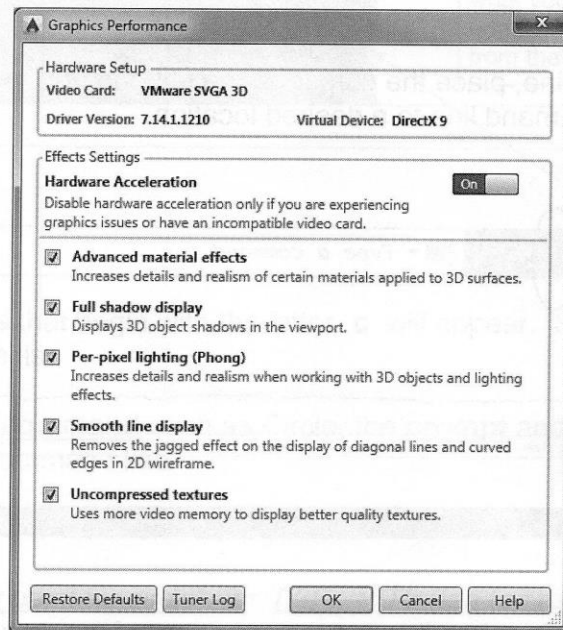
STATUS BAR TOOL BUTTON DESCRIPTIONS....CONTINUED

QUICK PROPERTIES

If **ON**, Quick Properties displays the properties of the object selected. If **OFF** the Quick Properties box will not appear. More on this in Lesson 12.

GRAPHICS PERFORMANCE

The Graphics Performance tool examines your graphics card and 3D display driver and determines whether to use software acceleration or hardware acceleration. You can change the performance settings by right-clicking on the tool button and selecting **Graphics Performance**, then change any settings required in the dialog box.



ISOLATE OBJECTS

You can choose to isolate objects by keeping them visible on the screen, all other objects will be hidden. Or you can choose to hide objects. To isolate or hide objects, left click on the **Isolate Objects** tool button and select either **Isolate Objects** or **Hide Objects** from the list. To restore all hidden objects left click on the **Isolate Objects** tool button and select **End Object isolation** from the list.

CLEAN SCREEN

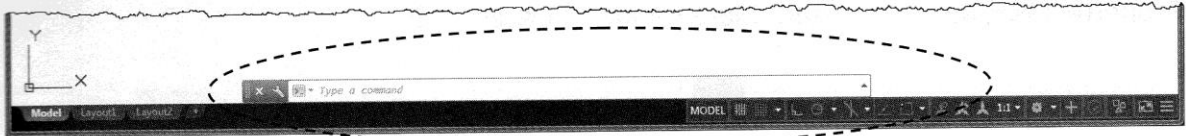
(You may also use **Ctrl+0** to toggle ON or OFF)

When Clean Screen is selected it will hide all tool palettes, windows and ribbons from the screen leaving you with a larger drawing area to work with. You can restore all the palettes, windows and ribbons by selecting the Clean screen tool button again.

APPLICATION WINDOW DESCRIPTIONS....continued

FLOATING COMMAND LINE

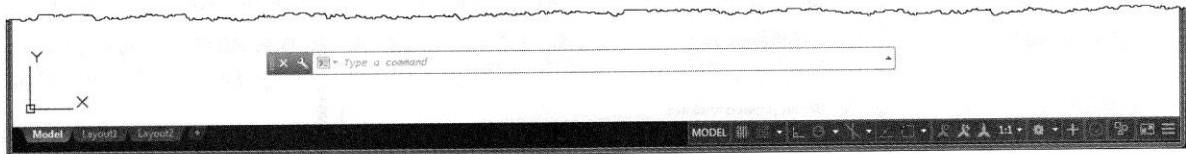
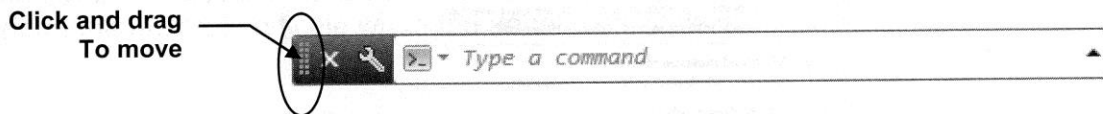
When you first start AutoCAD, and if the software has not been modified, the **Command Line** will be displayed at the bottom of the screen, as shown below.



This is where AutoCAD will prompt you for information and you will enter commands, values and select options. Basically this is how you communicate with AutoCAD.

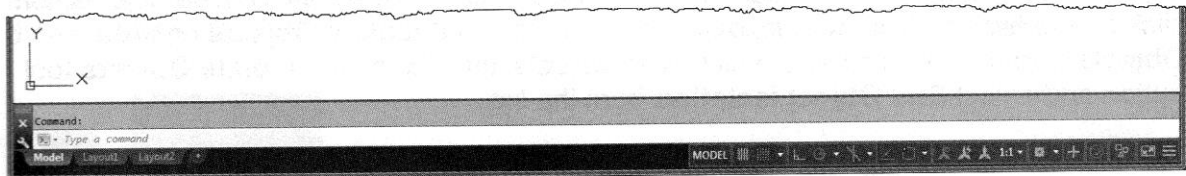
You may “dock” the command line at the top or bottom of the AutoCAD window or let it float in the drawing area.

To move the command line, place the cursor on the left end grip, press the left mouse button and drag the command line to a desired location.



To “dock” the command line drag it to the top or bottom of the drawing area. It will snap to the edge. You can’t dock the command line to the sides.

You may also drag it below the drawing area as shown below.



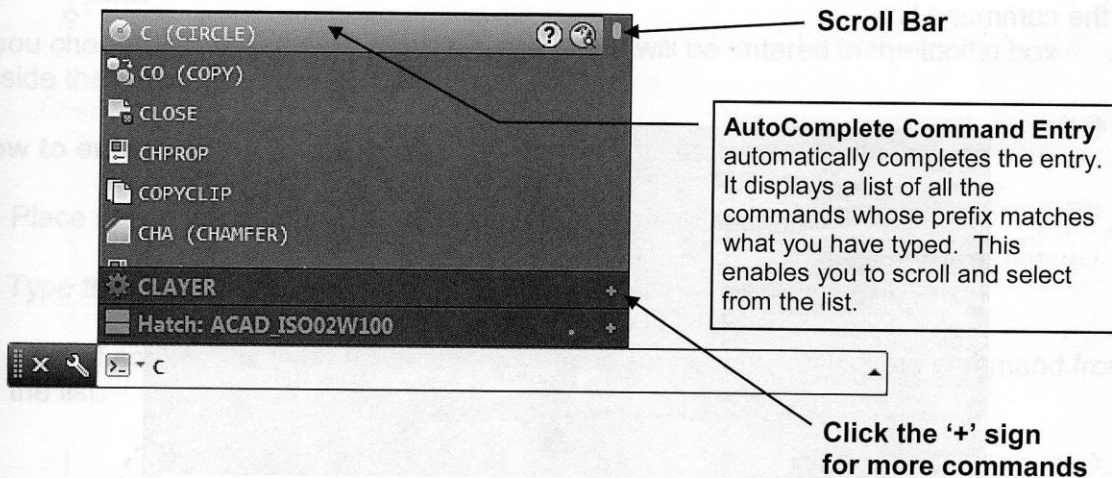
Note: You may toggle the Command Line **ON** and **OFF** using **Ctrl + 9**.

APPLICATION WINDOW DESCRIPTIONS....continued

COMMAND LINE

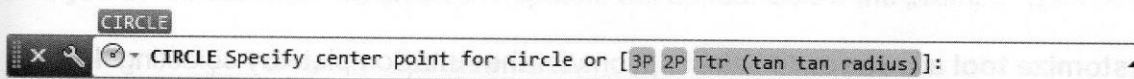
How to enter a command on the Command Line.

1. Type the first letter of a command, such as **c** for **circle**.



2. A list of commands that begin with the letter **c** will appear. Select the desired command from the list.
3. When you enter a **command** such as Circle, the **prompt** and **options** will be displayed on the command line.
4. The **prompt** for Circle command asks you to:

"Specify center point for circle" or [3P/2P/Ttr (tan tan radius)]:



The information within the [] brackets are options that you may select.

Clickable options are displayed in blue.

Options displayed in Black must be typed or selected from the option menu.

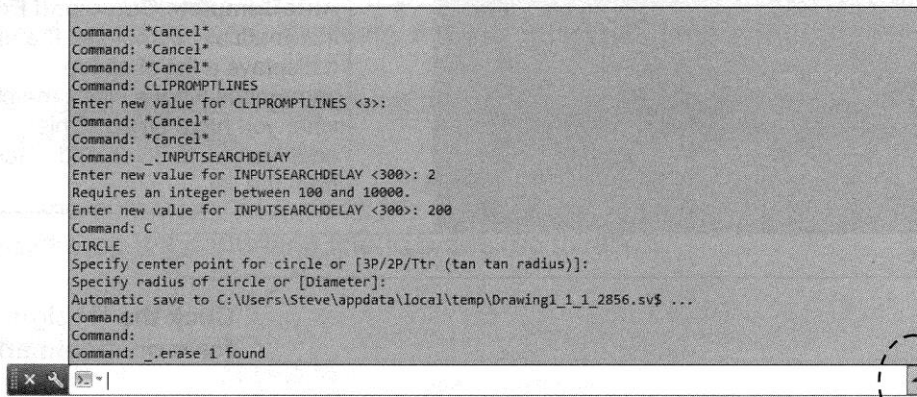
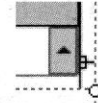
This will be discussed more in Lesson 2. Or for more advanced Command Line options, see Appendix-D.

APPLICATION WINDOW DESCRIPTIONS....continued

FLOATING COMMAND LINE

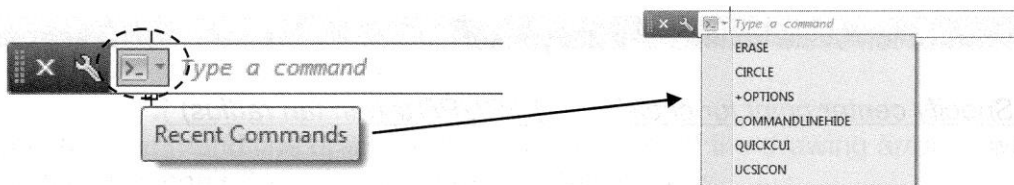
Command and Prompt history

As you enter commands AutoCAD records them as "history". You may display this history by pressing **F2** or the up arrow at the right hand end of the command line.

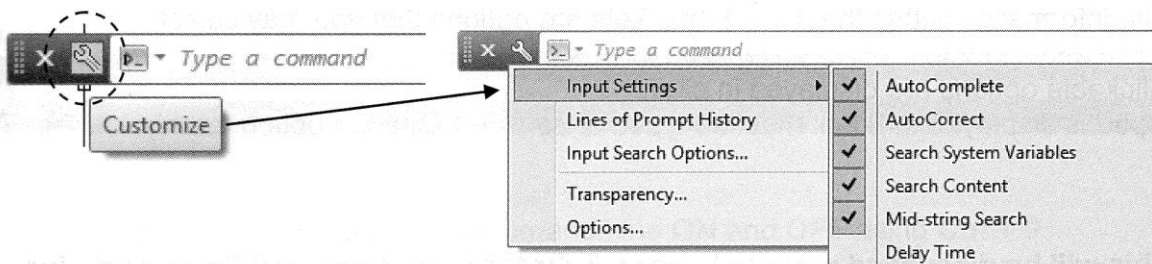


Command Line tools

Recent commands tool displays recently selected commands.



Customize tool allows you to select options for the AutoComplete by selecting 'Input Settings'. You can also control how many lines of history are displayed and the degree of transparency for the Command Line.



APPLICATION WINDOW DESCRIPTIONS....continued

DYNAMIC INPUT

Dynamic Input is another method of inputting commands, values and selecting options.

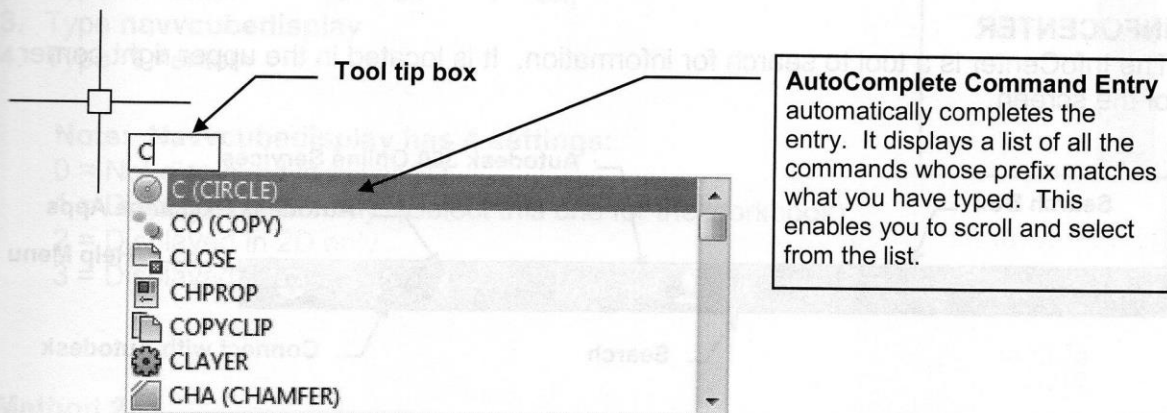
To use Dynamic Input you must turn **ON** the **Dynamic Input** button in the Status Bar, shown on page 1-14.



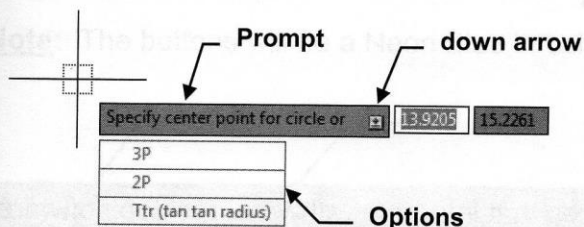
If you choose to use Dynamic Input the command will be entered in the tooltip box beside the cursor.

How to enter a command using Dynamic Input.

1. Place the cursor in the Drawing Area.
2. Type the first letter of a command, such as **c** for **circle**.
3. A list of commands that begin with the letter **c** will appear. Select the command from the list.



4. If you press the ↓ down arrow the options will appear below the prompt.



Notice the command entry is being displayed on the command line also.

Using the Command Line or Dynamic Input is **your choice**.

This will be discussed more in Lesson 2. Or for more advanced Command Line options, see Appendix-D.

APPLICATION WINDOW DESCRIPTIONS....continued

DRAWING AREA

The Drawing Area is the large open area of the screen. This is where you will draw. Consider this your paper.

The color of this area can be changed using **Options / Display tab / Color**

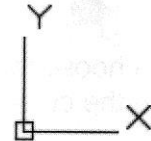
ORIGIN Icon

The Origin icon or UCS icon indicates the location of the Origin.

The Origin is where the coordinates X, Y and Z originate.

The X and Y coordinates for the Origin is 0, 0.

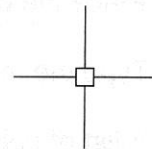
This will be discussed more in future Lessons.



CURSOR

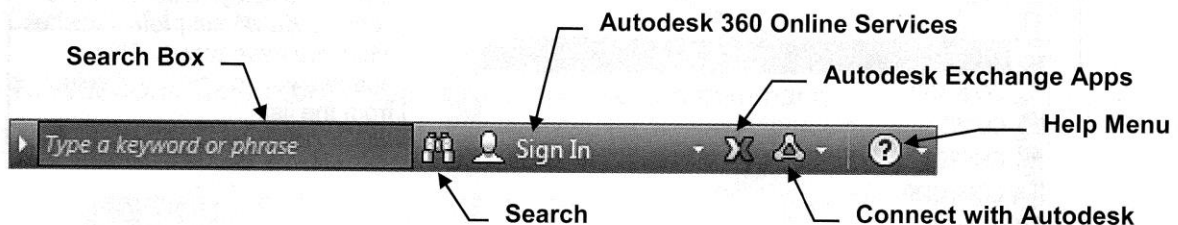
The Cursor is located within the Drawing Area. The movement of the pointing device, such as a mouse, controls the movement of the cursor. You will use the cursor to locate points, make selections and draw objects.

The size can be changed using **Options / Display tab / Crosshair Size**.



INFOCENTER

The InfoCenter is a tool to search for information. It is located in the upper right corner of the screen.



Search Box

The InfoCenter allows you to search for information by typing key words or a question in the "Help Box". After typing press **<enter>**

Search

Displays multiple search options.

Autodesk 360 Online Services

Sign in to Autodesk Online to access services that integrate with your desktop software.

Autodesk Exchange Apps

Displays the Autodesk Exchange window.

Help Menu

Displays the Help Window

APPLICATION WINDOW DESCRIPTIONS....continued

VIEWCUBE and NAVIGATION BAR

The ViewCube and the Navigation Bar are used primarily in the 3D mode. They enable you to view and rotate the 3D Model.

We will not be using these tools in this Workbook.
Refer to the "Advanced" workbook.

Since we are not using these tools you may choose to turn their display off. Follow the easy instructions below to turn the display off or on.

How to turn off the View cube and Navigation bar.

There are 2 methods:

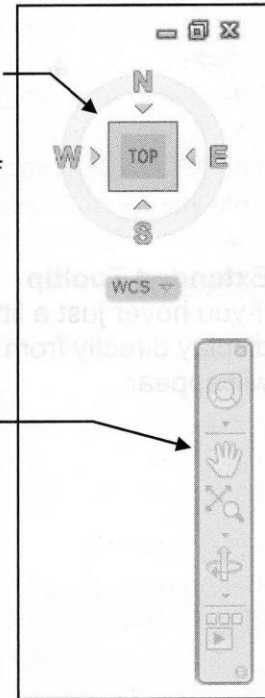
Method 1

1. Type **navbardisplay** <enter>
2. Type **0** <enter> [0 = off 1 = on]
3. Type **navcubedisplay**
4. Type **1** <enter>

Note: Navcubedisplay has 4 settings:

- 0 = Not displayed in 2D or 3D
- 1 = Displayed in 3D only (Select this one for the workbook)
- 2 = Displayed in 2D only
- 3 = Displayed in both 2D and 3D

ViewCube

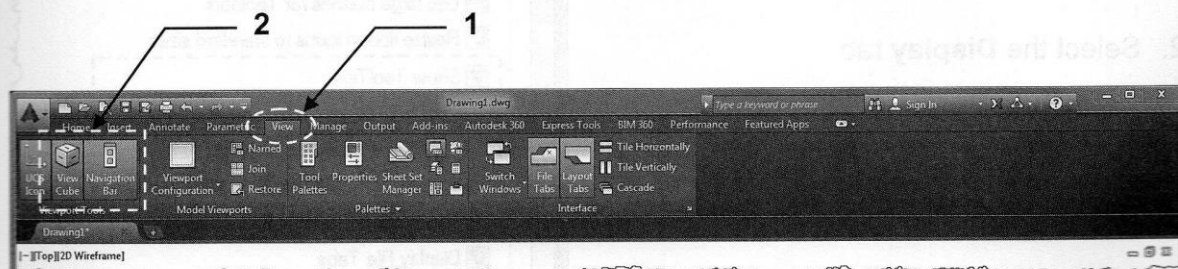


Navigation Bar

Method 2.

1. Select the **View** tab
2. Left click on the **ViewCube** and **Navigation Bar** buttons.

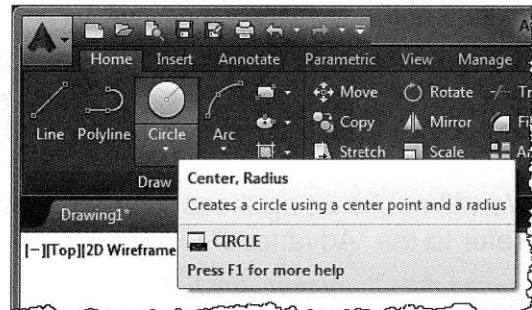
Note: The buttons will be a Neon Blue in color when switched on.



TOOLTIP HELP

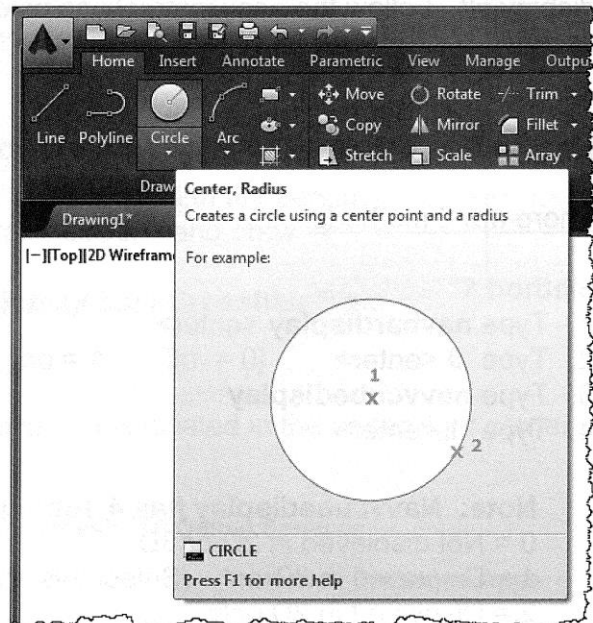
Basic Tooltip

When you hover your cursor over a tool an initial Tooltip will appear telling you the name of the tool with a brief description.



Extended Tooltip

If you hover just a little longer, a graphic display directly from the Help system, will appear.



How to turn off Tooltips

After you become familiar with AutoCAD you will want to turn these off. Or you may just want to delay the extended Tooltips.

1. Type **options** and press **<enter>**.
2. Select the **Display** tab
3. Uncheck boxes

