Useful AutoCAD Commands

**ZOOM**

Increases or decreases the apparent size of objects in the current viewport

**View menu:** Zoom

**Shortcut menu:** With no objects selected, right-click in the drawing area and choose Zoom to zoom in real time.

**Command line:** `zoom` (or `zoom` for transparent use)

Specify corner of window, enter a scale factor (nX or nXP), or

[All/Center/Dynamic/Extents/Previous/Scale/Window] <real time>:

**OFFSET**

Creates concentric circles, parallel lines, and parallel curves

OFFSET creates a new object at a specified distance from an existing object or through a specified point.

**Modify toolbar:**

**Modify menu:** Offset

**Command line:** `offset`

Specify offset distance or [Through] <current>: *Specify a distance, enter t, or press ENTER*
**LINE**

Creates straight line segments

**Draw toolbar:**

**Draw menu:** Line

**Command line:** line

Specify first point: *Press ENTER to continue from the last drawn line or arc or specify a point*

Specify next point or [Close/Undo]:

Define next point with either mouse click or command line. For command line use the following format: `@length<angle`. For example to draw a line of 2” at an angle of 90 degrees type, `@2<90`

**CIRCLE**

Creates a circle

**Draw toolbar:**

**Draw menu:** Circle

**Command line:** circle

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: *Specify a point (1) or enter an option*

**TRIM**

Trims objects at a cutting edge defined by other objects

Objects that can be trimmed include arcs, circles, elliptical arcs, lines, open 2D and 3D polylines, rays, splines, floating viewports, regions, text, and xlines.

**Modify toolbar:**
**Modify menu:** Trim

**Command line:** trim

Current settings: Projection = current Edge = current

Select cutting edges...

Select objects: Select one or more objects and press ENTER, or press ENTER to select all objects (implied selection)

Select the objects that define the cutting edges at which you want to trim an object or press ENTER to select all objects as potential cutting edges. TRIM projects the cutting edges and the objects to be trimmed onto the XY plane of the current user coordinate system (UCS).

Select object to trim or [Project/Edge/Undo]: Select an object to trim, press SHIFT and select an object to extend, or enter an option

When AutoCAD prompts you to select boundary edges, you can press ENTER and select the object to be trimmed. AutoCAD trims the object against the nearest candidate. You can use only the single, crossing, fence, and implied selection options to select boundaries that include blocks.

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**EXTEND**

Extends an object to meet another object

**Modify toolbar:**

**Modify menu:** Extend

**Command line:** extend

Select boundary edges...

Select objects: Select one or more objects and press ENTER or press ENTER to select all objects (implied selection)

Select object to extend or shift-select to trim or [Project/Edge/Undo]: Select an object to extend, or hold down SHIFT and select an object to trim, or enter an option
**MOVE**

Displaces objects a specified distance in a specified direction

**Modify toolbar:**

**Modify menu:** Move

**Shortcut menu:** Select the objects to move, right-click in the drawing area, and choose Move.

**Command line:** move

Select objects: *Use an object selection method and press ENTER when you finish*

Specify base point or displacement: *Specify a base point (1)*

Specify second point of displacement or <use first point as displacement>: *Specify a point (2) or press ENTER*

The two points you specify define a displacement vector that indicates how far the selected objects are to be moved and in what direction. If you press ENTER at the second point, the first point is interpreted as relative X,Y,Z displacement. If you press ENTER at the Specify Second Point of Displacement prompt, the first point is interpreted as relative X,Y,Z displacement. For example, if you specify 2,3 for the base point and press ENTER at the next prompt, the object moves 2 units in the X direction and 3 units in the Y direction from its current position.

**COPY**

Duplicates objects

**Modify toolbar:**

**Shortcut menu:** Select the objects to copy, right-click in the drawing area, and choose Copy Selection.

**Command line:** copy

Select objects: *Select objects and press ENTER*

Specify base point or displacement, or [Multiple]: *Specify a point (1) for a single copy or enter m for multiple copies*
**ERASE**

Removes objects from a drawing

**Modify toolbar:**

**Modify menu:** Erase

**Shortcut menu:** Select the objects to erase, right-click in the drawing area, and choose Erase.

**Command line:** `erase`

Select objects: *Use an object selection method and press ENTER when you finish selecting objects*

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**Properties Window**

**Standard toolbar:**

**Tools menu:** Properties

**Shortcut menu:** Select the objects whose properties you want to view or modify, right-click in the drawing area, and choose Properties. Alternatively, you can double-click on most objects to display the Properties window.

**Command line:** `properties`

The Properties window can be docked in the drawing area. Right-click the Properties window and choose Allow Docking or Hide to undock or hide it.

You can enter commands and work in AutoCAD while the Properties window is open.

When you select an object in the drawing area, the Properties window displays the properties of that object. If you select multiple objects, the Properties window displays all the properties they have in common.

Object properties are displayed either alphabetically or by category, depending on the tab you choose. To modify properties using the Properties window select the object whose properties you want to change and use one of the following methods:

- Enter a new value
• Select a value from a list
• Change the property value in a dialog box
• Use the Pick Point button to change a coordinate value

The Select Objects button in the Properties window provides access to the full complement of selection methods, such as Fence and Crossing Polygon, from the Command prompt. You choose Select Objects, select the desired objects using any selection method, and press ENTER. The properties common to the selected objects are displayed in the Properties window. You can then modify the properties of the selected objects in the Properties window or you can make other changes to the selected objects by entering an editing command.

**ROTATE**

Moves objects about a base point

**Modify toolbar:**

**Modify menu:** Rotate

**Shortcut menu:** Select the objects to rotate, right-click in the drawing area, and choose Rotate.

Command line: **rotate**

Current positive angle in UCS: ANGDIR=*current* ANGBASE=*current*

Select objects: *Use an object selection method and press ENTER when you finish*

Specify base point: *Specify a point* (1)

Specify rotation angle or [Reference]: *Specify an angle, specify a point, or enter r*

**Useful Toolbars**

• Standard
• Draw
• Object Properties
• Modify
• Object Snap – not default, need to add