

This guide covers some of the most commonly using AutoCAD drafting tools.

The properties of these objects, including their elevation and beginning and ending coordinates, can be modified by selecting the objects and opening the *Properties* window. Open the *Properties* window by clicking on the  icon, which is located on the *Palettes* panel of the *Home* ribbon.

The properties of individual segments of objects which have individual vertices, such as polylines and rectangles, can be modified through the *Properties* window. Select the object, go to the *Properties* window and click on the *Vertex* cell. Arrows will appear next to the vertex number which you can use to scroll between individual vertices and modify their properties.

### Line

Icon:   
Command: LINE  
Location: Draw panel on the *Home* ribbon  
Draw toolbar  
Description: The Line command creates a single straight line or a series of individual lines separated by vertices. Elevations can be assigned to the ends of the lines by changing the Start Z and End Z values in the *Properties* window.

### Arc

Icon:   
Command: ARC  
Location: Draw panel on the *Home* ribbon  
Draw toolbar  
Description: This command creates an arc based on three points that it will prompt you to specify. By default, you will be prompted to select the beginning point of the arc, the center, and the end point of the arc. You also have an option to choose to select the center first, and then the starting and ending points of the arc.

### 2D Polyline

Icon:   
Command: PLINE  
Location: Draw panel on the *Home* ribbon  
Draw toolbar  
Description: The 2D Polyline command creates a two dimensional polyline object, with individual segments connected together to form a continuous object. If you assign an elevation to the 2D polyline it will apply to the entire object, so each individual segment will have the same elevation.

### Polyline Edit

Icon:   
Command: PEDIT  
Location: *Modify* panel on the *Modify* ribbon (Click on the down arrow to expand the command listing)  
*Modify II* toolbar  
Description: This command is used to modify 2D polylines. Some of the modifications you can make to the polyline include close, join, edit vertex and reverse. If you are going to join several polylines into a single object, be sure to specify that you are selecting multiple polylines (i.e. type 'm' at the command line) in the first step when you are asked to select the polyline(s).

### Circle

Icon:   
Command: CIRCLE  
Location: Draw panel on the *Home* ribbon  
Draw toolbar  
Description: This command creates a circle, with various options for creating the object. By default, you will be prompted to select the center of the circle and then to enter the diameter.

**Rectangle**

Icon:



Command:

RECTANG

Location:

*Draw* panel on the *Home* ribbon  
Draw toolbar

Description:

This command is used to create a rectangle by specifying two corners of the object. The sites are aligned along the x and y directions of the drawing.

**Curves**

Icon:



Command:

(various)

Location:

*Draw* panel on the *Home* ribbon

Description:

There are several commands available for creating curves, including:  
Create Curves between Two Lines  
Create Curves on Two Lines  
Create Curve through Point  
Create Multiple Curves  
Create Curve from End of Object  
Create Reverse or Compound Curve  
Curve Calculator**Ellipse**

Icon:



Command:

ELLIPSE

Location:

*Draw* panel on the *Home* ribbon  
Draw toolbar

Description:

This command creates an ellipse, with various options for creating the object. By default you will be prompted to select the center of the ellipse and the endpoints on the x and y axes.

**Polygon**

Icon:



Command:

POLYGON

Location:

*Draw* panel on the *Home* ribbon (Click on the down arrow to expand the command listing)  
Draw toolbar

Description:

This command creates an equilateral closed polygon. You will be prompted to enter the number of sides for the polygon object, to specify the center or edge of the polygon, whether it is inscribed or circumscribed about a circle, and for the radius of the circle.

**3D Polyline**

Icon:



Command:

3DPOLY

Location:

*Draw* panel on the *Home* ribbon (Click on the down arrow to expand the command listing)

Description:

The 3D Polyline command creates a three dimensional polyline object, with individual segments connected together to form a continuous object. The 3D polyline differs from a 2D polyline in that each node can have a different elevation assigned to it.