

Chapter 15 Polylines

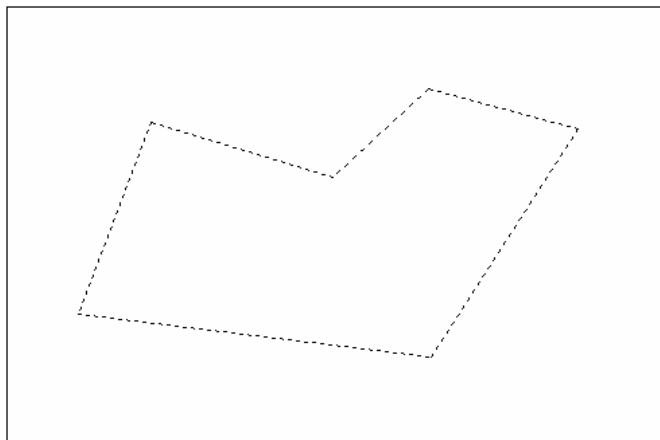
AutoCAD 2D Tutorial

Pline Command 15.1

A polyline is a connected sequence of line segments created as a single object. You can create straight line segments, arc segments, or a combination of the two.

1. **Choose** Draw, Polyline.
or
2. **Pick** the Pline icon. 
3. **Type** PLINE at the command prompt
Command : **PLINE** or **PL**
4. **Pick** A point on the drawing to start the polyline
From point:(**select**)
5. **Type** One of the following options
Arc/Close/Halfwidth/Length/Undo/Width/<endpoint of line>:
or
6. **Pick** A point to continue drawing
Arc/Close/Halfwidth/Length/Undo/Width/<endpoint of line>: (**pick point**)

Polyline as one segment

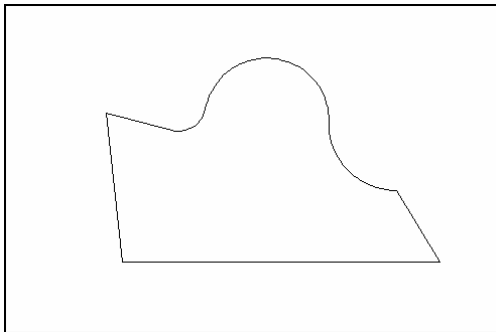


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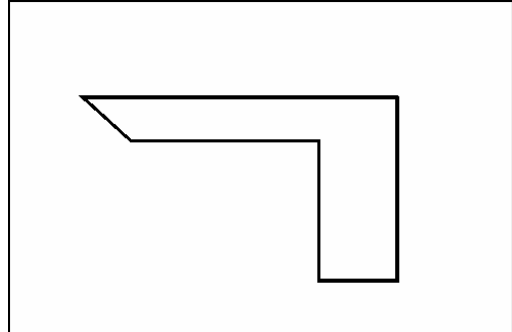
PLINE options:

Arc	Toggles to arc mode and you receive the following: Angle/CENTER/Close/Direction/Halfwidth/Line/ Radius /Second Pt/Undo/Width/<endpt of arc>:
Close	Closes a polyline as it does in the line command.
Halfwidth	Specifies the halfwidth of the next polyline segments. Can be tapered.
Length	Specifies the length to be added to the polyline in the current direction.
Undo	Undoes the previous pline segment as with the line command.
Width	Specifies the width of the next polyline segments. Can be tapered.

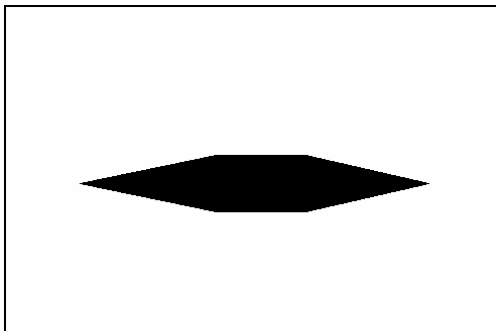
Polyline with arcs



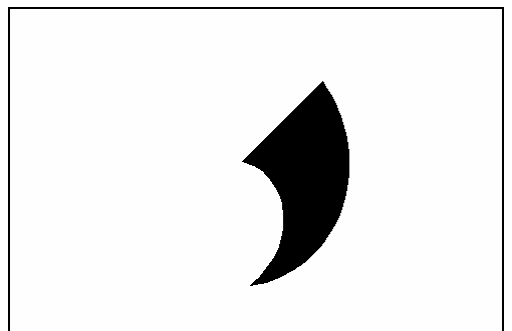
Polyline with width .125



Tapered width polyline




Tapered width arc polyline

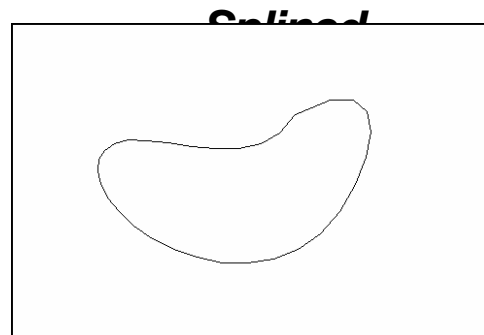
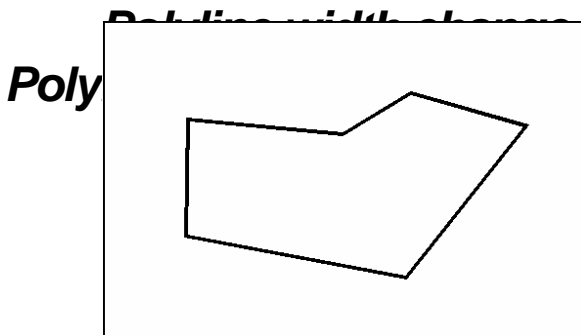


AutoCAD 2D Tutorial

Editing Polylines 15.2

1. **Choose** *Modify, Polyline.*
or
2. **Pick** the Pedit icon from the Modify II toolbar. 
3. **Type** PEDIT at the command prompt
Command: **PEDIT**
4. **Pick** Pick a polyline to edit
Select Polyline: (**pick**)
5. **Type** One of the following options: Close/Join/ Width/Edit vertex/FitCurve/Spline/Curve/Decurve/Undo/eXit

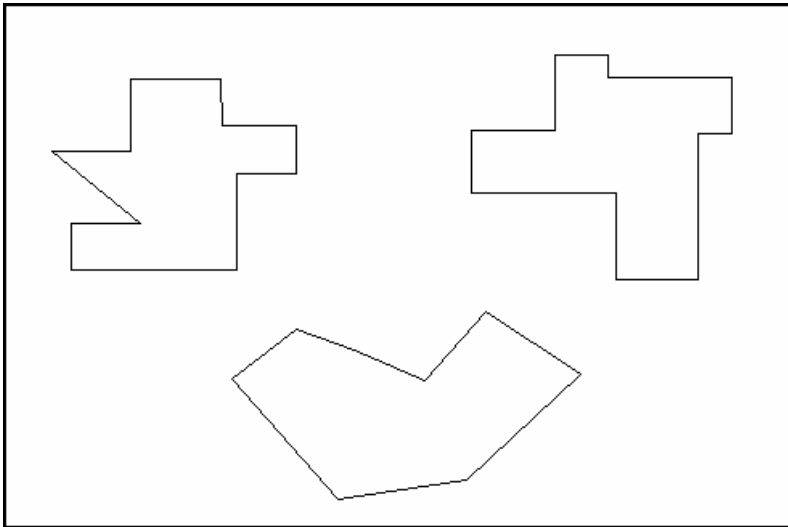
- Close** Closes open polyline segments
- Join** Connects polylines, lines, and arcs to existing polylines.
- Width** Changes the width for all polyline segments.
- Fit curve** Creates curved arc segments around pline vertices at the direction you specify.
- Spline Curve** Creates a curve through control points on a polyline.
- Decurve** Straightens curved segments.
- Edit Vertex** Displays the following Edit Vertex Options:



AutoCAD 2D Tutorial

Editing Multiple Polylines

1. **Type** the PEDIT at the command prompt. Command: **PEDIT**
Select polyline or [Multiple]: **M**
Pick multiple polylines to edit.




AutoCAD 2D Tutorial

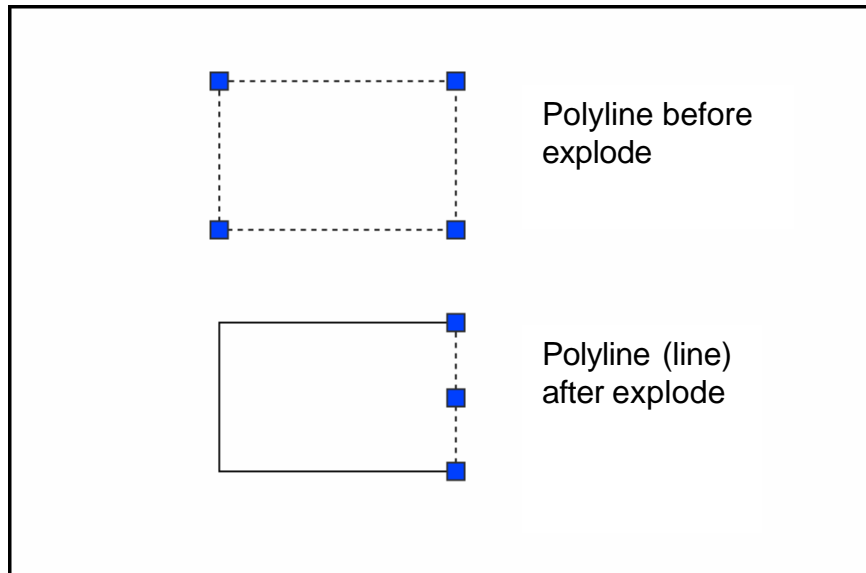
Editing Vertex Options 3.3

- Type** One of the following vertex options:
Next/Previous/Break/Insert/Move/Regen/Straighten/
Tangent/Width/eXit<N>:
 - Next** Moves the X to the next vertex
 - Previous** Moves the X to the previous vertex
 - Break** Remembers the currently marked vertex and allows you to move to another vertex. You can then remove the segments between these vertices. Closed plines will open.
 - Insert** Adds a new vertex after the currently marked vertex.
 - Move** Moves the location of the currently marked vertex.
 - Regen** Regenerates the pline. Used with the width option.
 - Straighten** Remembers the currently marked vertex and allows you to move to another vertex. You can then replace the segments between these vertices with a straight one.
 - Tangent** Attaches a tangent direction to the current vertex for later use in curve fitting.
 - Width** Changes starting and ending widths for the segment following the marked vertex.
 - eXit** Exits from editing vertices.

AutoCAD 2D Tutorial

Explode Command 15.4

1. **Choose** *Modify, Explode.*
or
2. **Pick** the Explode icon. 
3. **Type** EXPLODE at the command prompt.
Command: **EXPLODE**
or
4. **Pick** The object to explode. Select objects: (**pick**)



AutoCAD 2D Tutorial

Turning Lines into Polylines 15.5

Use the PEDIT command to pick lines. AutoCAD will ask if you want to turn these lines into polylines. You can then use the JOIN option under PEDIT to join additional lines to the polyline.

1. Command: **pedit**
Select polyline or [Multiple]: **pick line**
Object selected is not a polyline
Do you want to turn it into one? <Y>
Enter an option [Close/Join/Width/Edit
vertex/Fit/Spline/Decurve/Ltype gen/Undo]: j

TIP:

- Lines and Arcs must have a common endpoint to join them together.