### 2.5 Ellipse

An ellipse is one object. ellipse is access by

1. Command Line: El
2. Menu Bar: Draw $\rightarrow$ Ellipse

## 3. Draw Bar:

In AutoCAD three ways to draw ellipse: two of them are

1. Axis end (Specify one axis and the end of second)

Command : ellipse
Specify axis end point of ellipse or [Arc / Center]:


Specify other end point of axis:
Specify distance to other axis or [Rotation]:
2. Center (Specify the center and the end of each axis)

Specify axis end point of ellipse or [Arc / Center]:C
Specify center of ellipse:
Specify end point of axis:


Specify distance to other axis or [rotation]:
Example (4-1): Draw the following figure


### 2.6 Polygon

The Polygon command enables to create regular polygon with 3 to 1024 sides. A regular polygon is one with sides of equal length.

1. Command Line: Pol
2. Menu Bar: Draw $\Rightarrow$ Polygon

## 3. Draw Bar:

When enter polygon command, the following message appear:

## Enter number of sides<>:

## Specify center point or [edge]:

If the Edge option is selected, the program require the following:

## Specify first endpoint of edge:

Specify second endpoint of edge:
If specifies Center point is selected, the program requires the radius of circle:
Enter an option [Inscribed in circle / Circumference about circle] < >:

## Options:

Inscribed option allows control of one half of the distance across the corner. . I
Circumscribed option allows control of one half of the distance across the flats. . C
When determine one of the options the program display the message:
Specify radius of circle:


Remark: (the circle is not display in the drawing).
Example (4-2): Draw the following figure.


Example (4-3): Draw the following figure.


### 2.7 Poly Line

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.

To access the Pline command:

1. Command Line: pline or PL
2. Menu Bar: Draw $\rightarrow$ PolyLine

## 3. Draw Bar :

Some reasons may choose to use polylines:

- Vertices remain joined
- Absolute line width that can be constant or tapered across a segment
- Move and copy a polyline as a unit
- Easily create rectangles and polygons as single objects

Prompt: Arc / Close / Halfwidth / Length / Undo / Width / <Endpoint of Line>: select an option or select the next end of the Pline segment.

## Example (4-4): Draw the following figure



Example (4-5): using polyline, Draw the following figure


