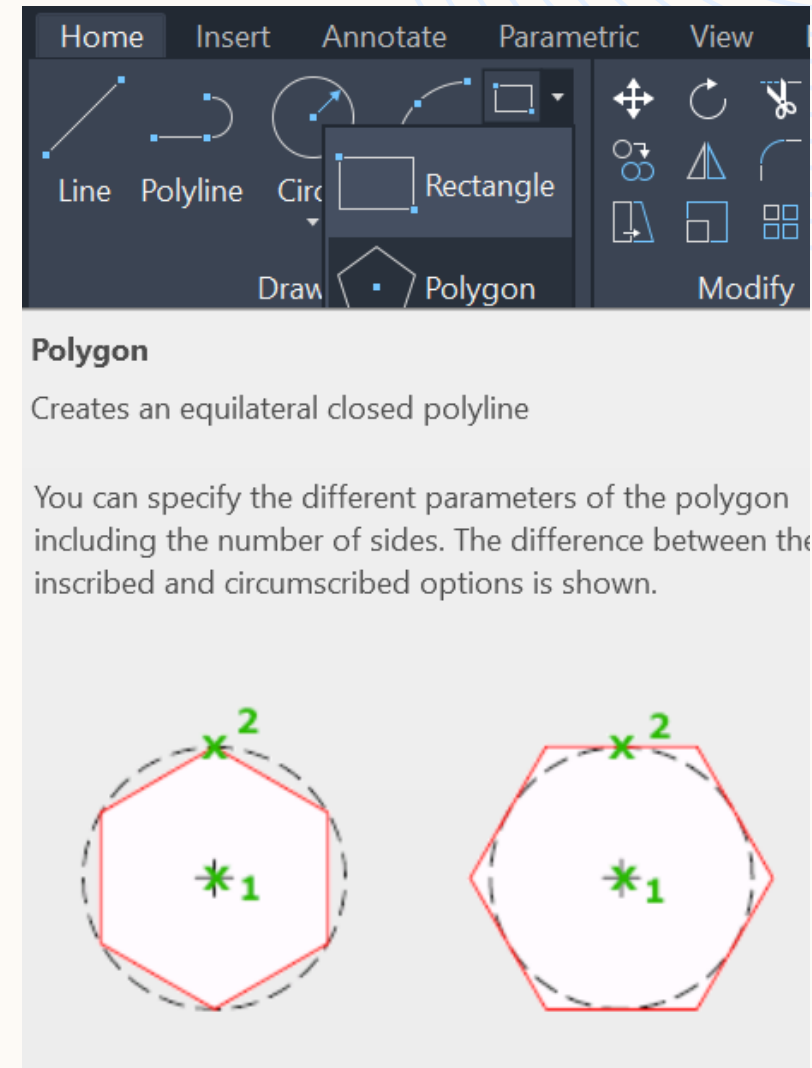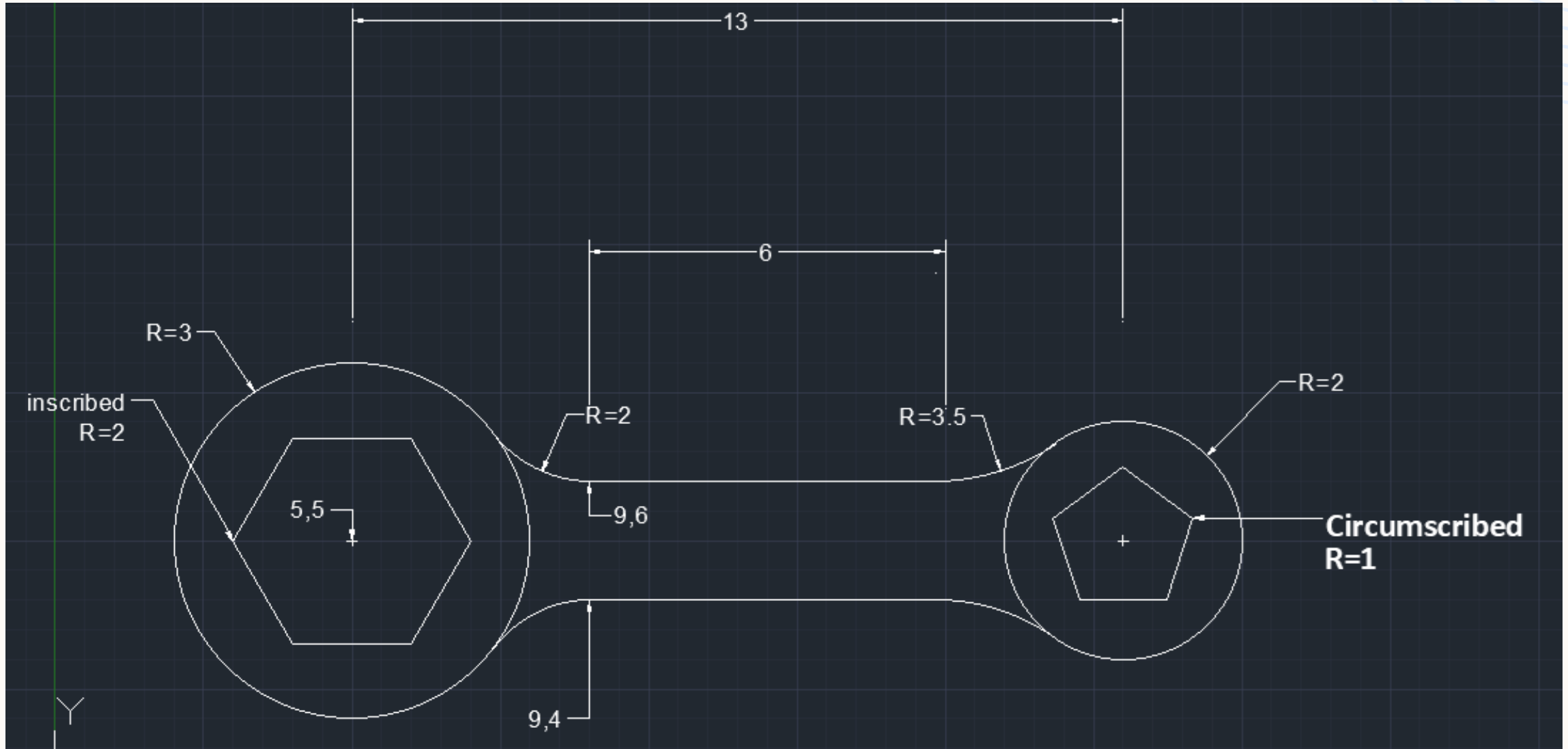# DRAWNG POLYGON

LECTURE THIRTEEN

Asst. lecturer

ISRAA HUSSEIN

- ==polygon option:==

- ==The center option==

- In AutoCAD, we can draw polygon by select a point as the center point of the polygon.

- Then, **Enter an option [Inscribed in circle/Circumscribed about circle] <I>:** this mean

- **Inscribed in circle** mean Polygon is drawn inside an imaginary circle and its corners touch the circle.

- **Circumscribed about circle** mean Polygon is drawn outside an imaginary circle and the sides of polygon tangent to the circle.

Home   Insert   Annotate   Parametric   View

Line   Polyline   Circ   Rectangle   Draw   Polygon   Modify

Polygon

Creates an equilateral closed polyline

You can specify the different parameters of the polygon including the number of sides. The difference between the inscribed and circumscribed options is shown.

Example/ Draw the figure with dimension by using draw and modify options?

Solution

Command: _circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 5,5 enter
Specify radius of circle or [Diameter] <3.4943>: 3 enter
Command: _circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 18,5 enter
Specify radius of circle or [Diameter] <3.4943>: 2 enter
Command: polygon enter
Command: _polygon Enter number of sides <4>: 6 enter
Specify center of polygon or [Edge]: 5,5 enter
Enter an option [Inscribed in circle/Circumscribed about circle] <I>: I enter
Specify radius of circle: 2 enter
Command: _line
Specify first point: 9,6enter
Specify next point or [Undo]: @6,0enter
Specify next point or [Close/Undo]: enter

Solution

Command: _line
Specify first point: 9,4enter
Specify next point or [Undo]: @6,0enter
Specify next point or [Close/Undo]: enter

Command: _circle enter
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: _ttr enter
Specify point on object for first tangent of circle: select first tangent
Specify point on object for second tangent of circle: select second tangent
Specify radius of circle <3.5000>: 2 enter
Command: polygon enter
Command: _polygon Enter number of sides <4>: 5 enter
Specify center of polygon or [Edge]: 18,5 enter
Enter an option [Inscribed in circle/Circumscribed about circle] <I>: C enter
Specify radius of circle: 1 enter

Solution

Command: _circle enter
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: _ttr enter
Specify point on object for first tangent of circle: select first tangent
Specify point on object for second tangent of circle: select second tangent
Specify radius of circle <3.5000>: 2 enter

Command: _circle enter
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: _ttr enter
Specify point on object for first tangent of circle: select first tangent
Specify point on object for second tangent of circle: select second tangent
Specify radius of circle <3.5000>: 2 enter

Command: _circle enter
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: _ttr enter
Specify point on object for first tangent of circle: select first tangent
Specify point on object for second tangent of circle: select second tangent
Specify radius of circle <3.5000>: 3.5 enter

Command: _circle enter
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: _ttr enter
Specify point on object for first tangent of circle: select first tangent
Specify point on object for second tangent of circle: select second tangent
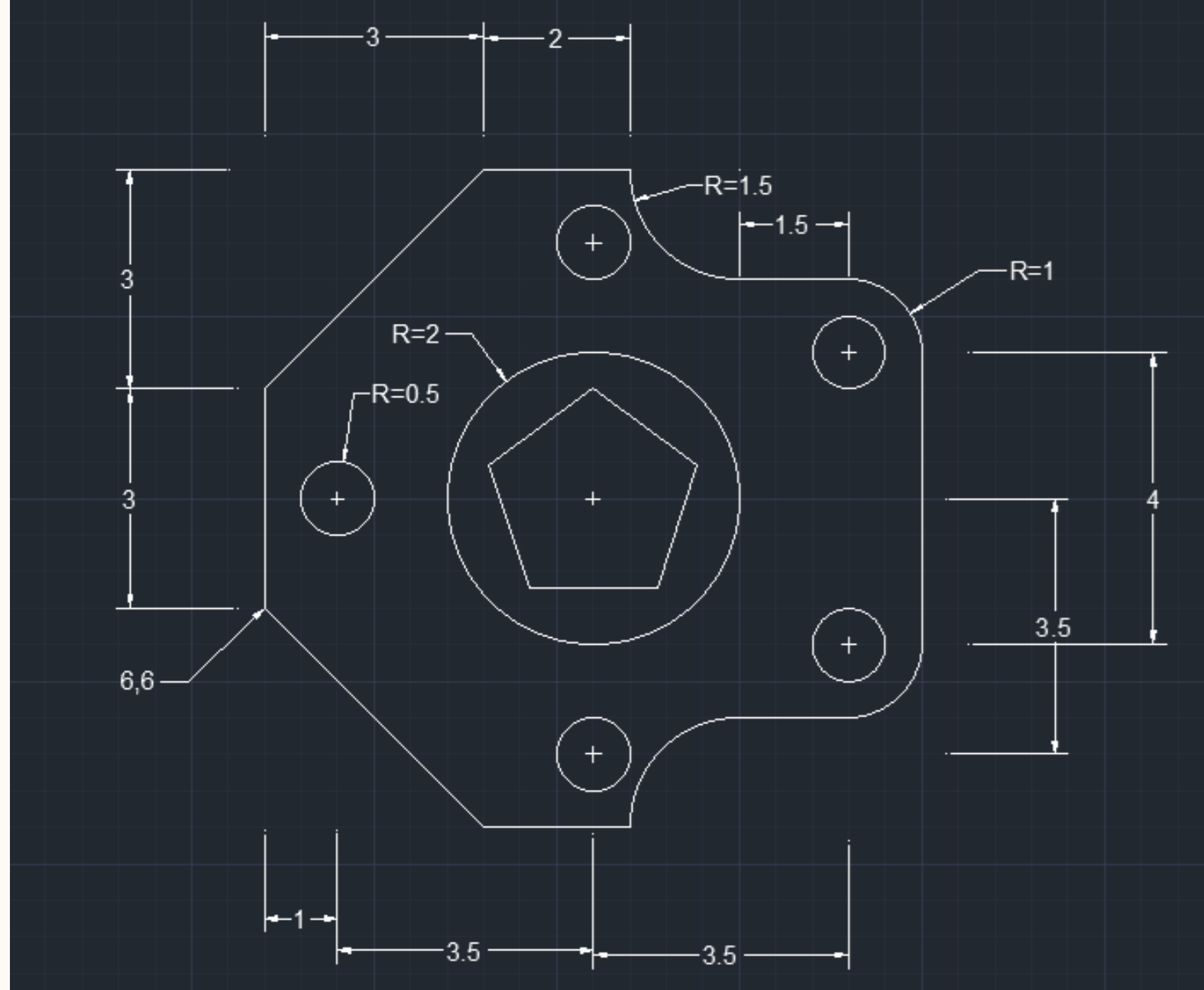Specify radius of circle <3.5000>: 3.5enter

==Solution==

- After that using trim option to delete the part of circle that drawing by option ==ttr== by
- ==Select trim option==
- Then right click on the graphical area
- Next, delete parts of circle not required in the drawing by left click on the part not required

- ==For add dimension==
- Home >annotation>
- Linear Dimension from

Dimension

- Coordinate of point from

- Radius of circle from

- And use ==move option== to output the lines of dimension from the inside of figure

- H.W1/ Draw a polygon with ten sides that the first endpoint of the edge(7,1) and the second endpoint of the edge (8,2)?.

- H.W2/ Draw the figure by using different options? Polygon is drawn Inscribed in circle radius=1.5?

THANK YOU