

Drawing circle

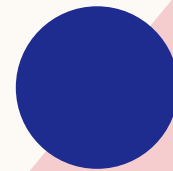
LECTURE FOUR

Asst. lecturer
ISRAA HUSSEIN

Objectives

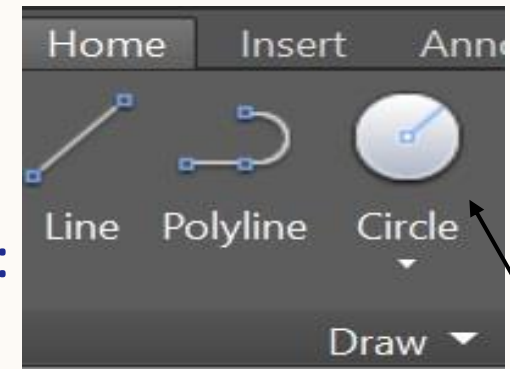
Draw circle by using the circles command

Circle option



1. Circle

- The circle tool can be arrived from:
- Home> draw> circle



- عند الضغط عليها تظهر الخيارات التالية

- From the command window by write **c** after that click **enter**
- Command: CIRCLE **enter**
- Specify center point for circle or [3P/2P/Ttr (tan tan radius)]:

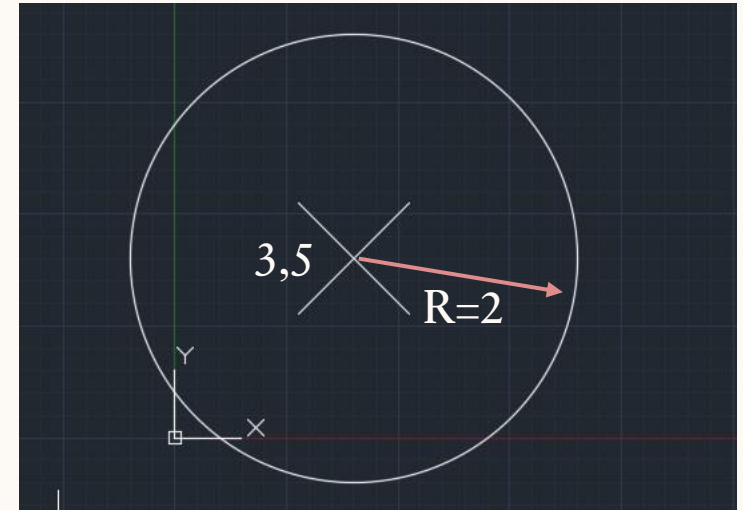


- Circle options
 - **The Center, Radius.**
 - In AutoCAD, You can draw circle by entering coordinate of center of circle and radius.
 - يمكن رسم الدائره عن طريق ادخال مركزها ونصف قطرها

Command: **CIRCLE** enter

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: **3,5** enter

Specify radius of circle or [Diameter] <5.0000>: **2** enter



A circle drawing by center and radius

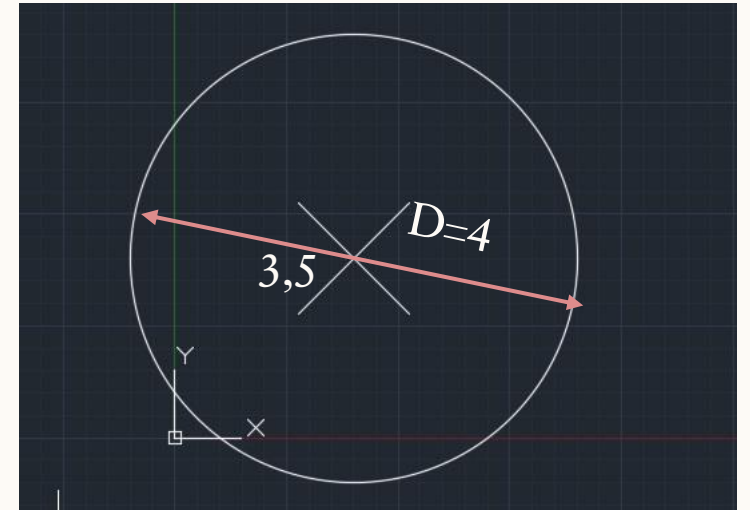
- Circle options
 - The Center, Diameter.
 - In AutoCAD, You can draw circle by entering coordinate of center of circle and diameter.
 - يمكن رسم الدائره عن طريق ادخال مركزها و قطرها

Command: CIRCLE enter

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 3,5 enter

Specify radius of circle or [Diameter] <2.0000>: d enter

Specify diameter of circle <4.0000>: 4 enter



- Circle options
 - The two -point (2P).
 - In AutoCAD, You can draw circle by entering coordinate of two end points of circle's diameter

- يمكن رسم الدائره عن طريق ادخال احداثيات نقطتين من خلال هذان النقطتان يتم تحديد موقع وقطر الدائره

- In AutoCAD, draw acircle that passes through the points (3,3) and (5,7)?

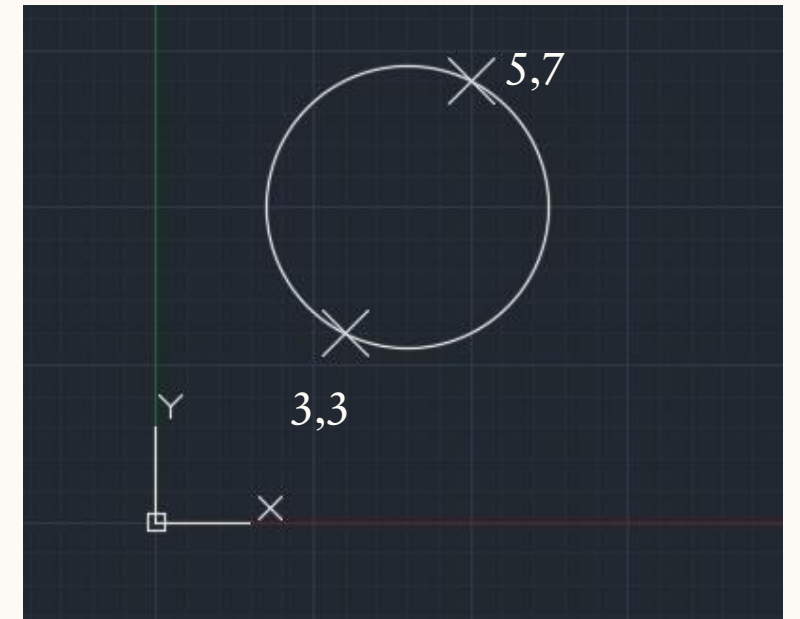
solution

Command: **CIRCLE enter**

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

Specify first end point of circle's diameter: **3,3 enter**

Specify second end point of circle's diameter: **5,7 enter**



A circle drawing by 2P option

- Circle options
 - The three-points (3P).
 - In AutoCAD, You can draw circle by entering coordinate of three points on its circumference.

يمكن رسم الدائره عن طريق ادخال احداثيات ثلاث نقاط على محيط الدائره

- In AutoCAD, draw acircle that passes through the points (3,3),(6,7) and (7,5)?

solution

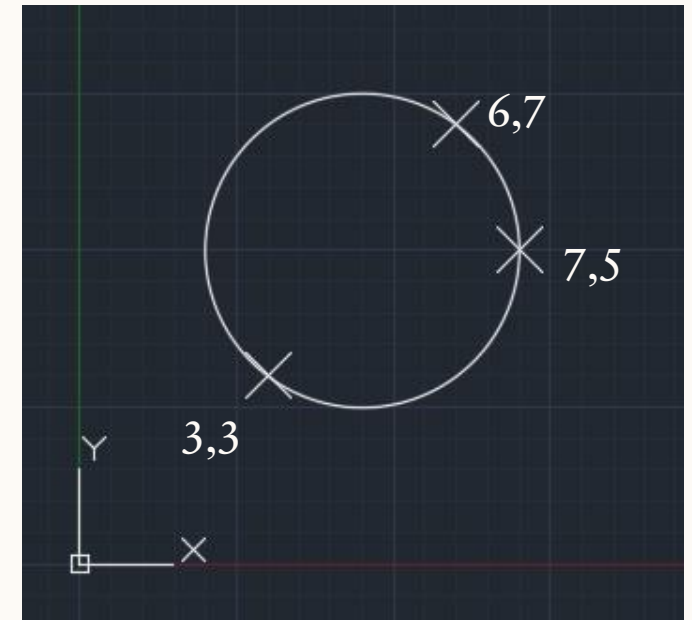
Command: CIRCLE enter

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 3p enter

Specify first point on circle: 3,3 enter

Specify second point on circle: 6,7 enter

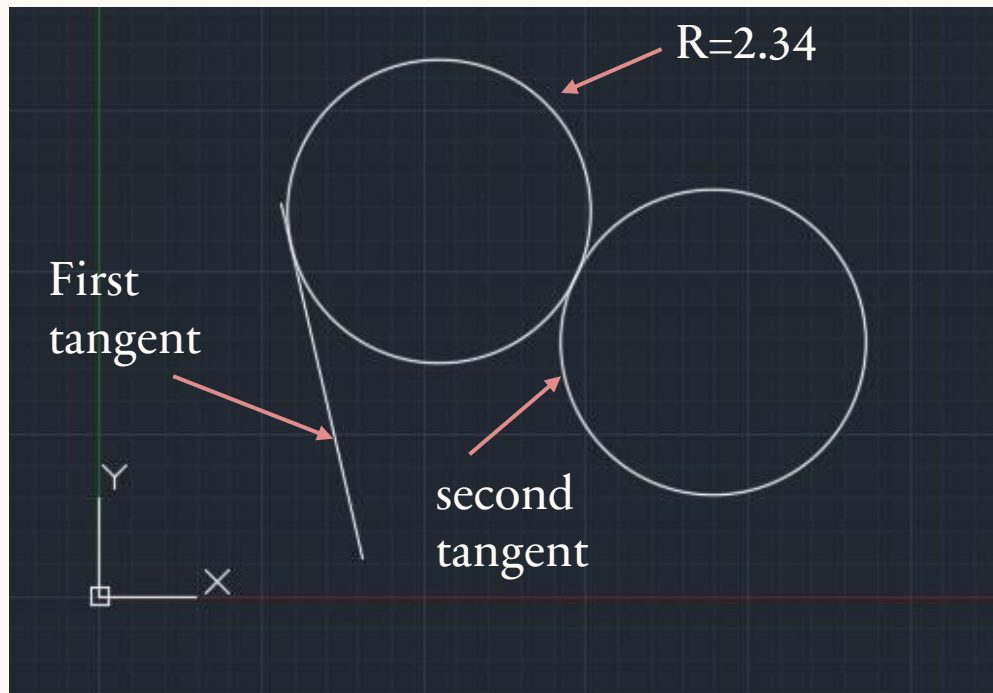
Specify third point on circle: 7,5 enter



A circle drawing by 3P option

- Circle options
 - The tan, tan, radius.
 - In AutoCAD, You can draw circle by using tan, tan, radius. Tan (tangent) can be line, circle or arc that contact with circumference of circle at only one point .

- يمكن رسم الدائره تماس مماسين و معطى نصف قطرها والمماس
يمكن ان يكون دائره, خط او قوس.



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 by left click on the line .**

Specify point on object for second tangent of circle: **select second tangent by left click on the circle circumference**

Specify radius of circle <2.3480>: **2.34** enter

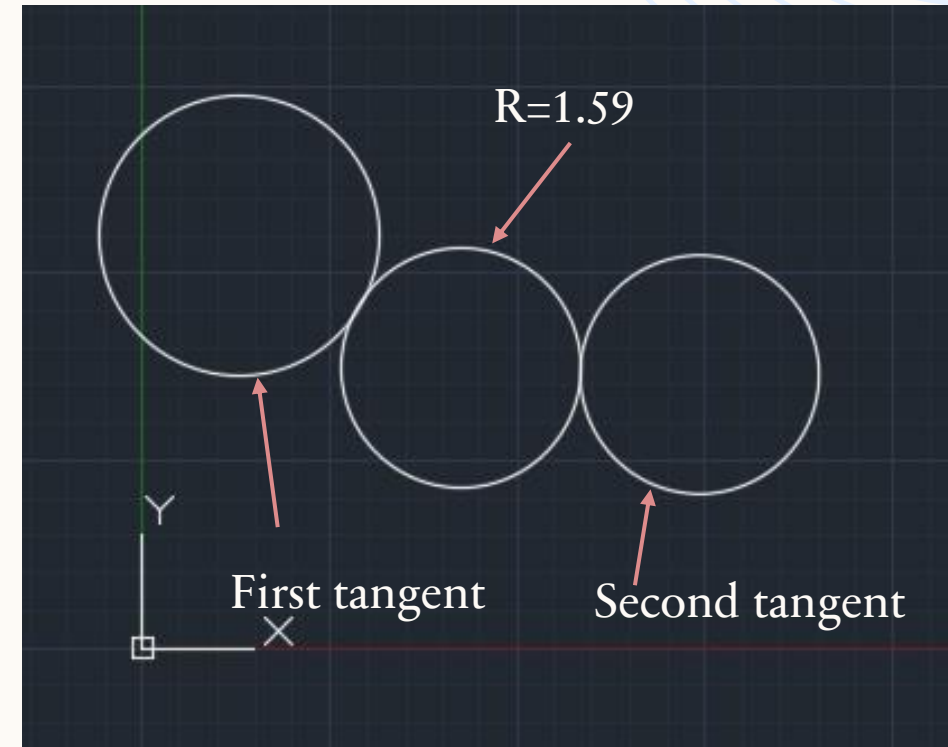
Command: **CIRCLE** enter

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 by left click on the circle circumference**

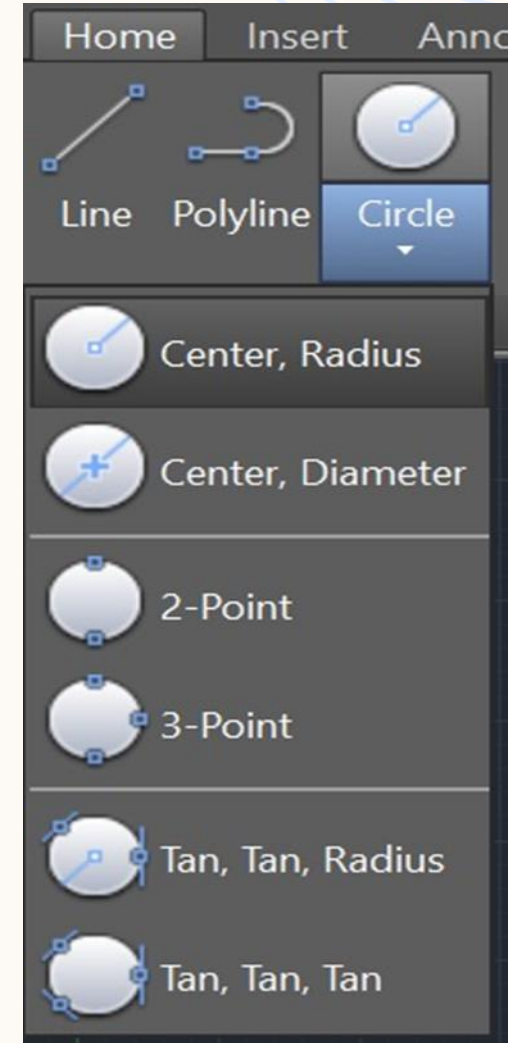
Specify point on object for second tangent of circle: **select second tangent by left click on the circle circumference**

Specify radius of circle <1.5970>: **1.59** enter



A circle drawing by 3P option

- Circle options
 - The tan, tan, tan.
 - In AutoCAD, You can draw circle by using tan, tan, tan. Tan (tangent) can be line, circle or arc that contact with circumference of circle at only one point .
- يمكن رسم الدائره تماس ثلاث مماسات والمماس ان يكون دائره, خط او قوس.
- home > draw > circle > tan,tan,tan



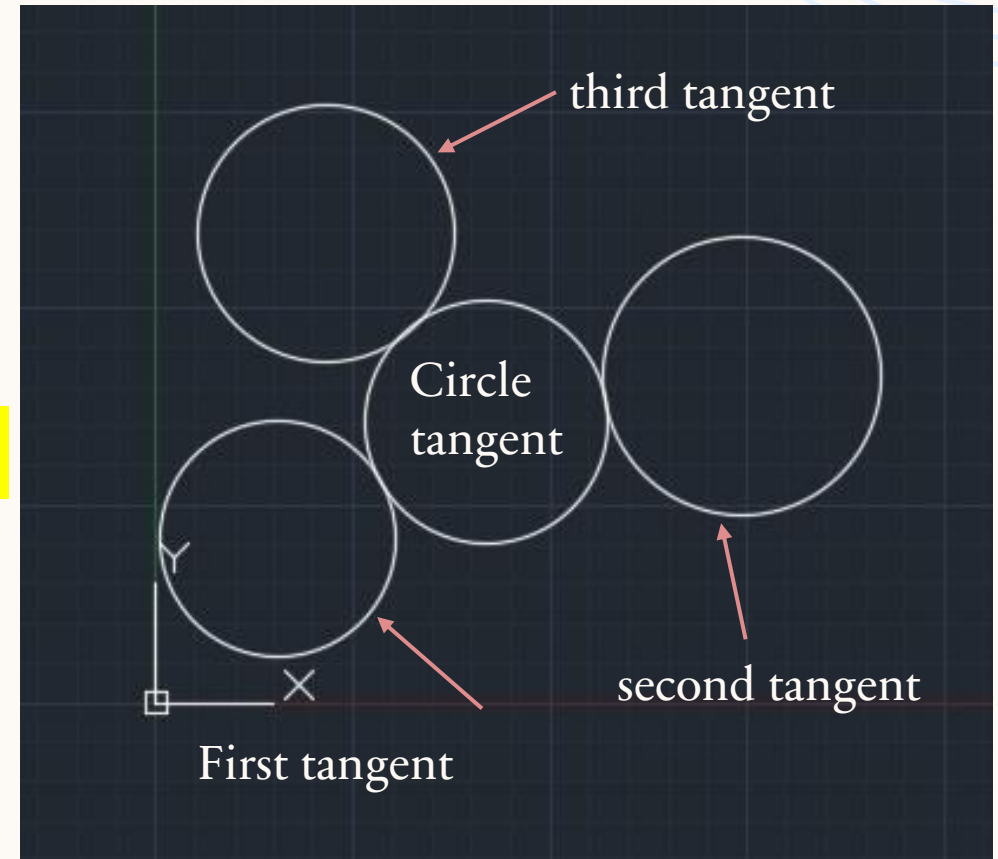
- Circle options
 - The tan, tan, tan.

Command: `_circle enter`

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: `_3p` Specify first point on circle: `_tan` to select the first tangent

Specify second point on circle: `_tan` to select the second tangent

Specify third point on circle: `_tan` to select the third tangent



- Draw the figure below by using different options?

Command: **L** enter

Specify first point: **3,6** enter

Specify next point or [Undo]: **@4.5<120** enter

Specify next point or [Undo]: **@4.5<240** enter

Specify next point or [Close/Undo]: **@4.5<0**
enter

Specify next point or [Close/Undo]: **enter**

Command:

Command:

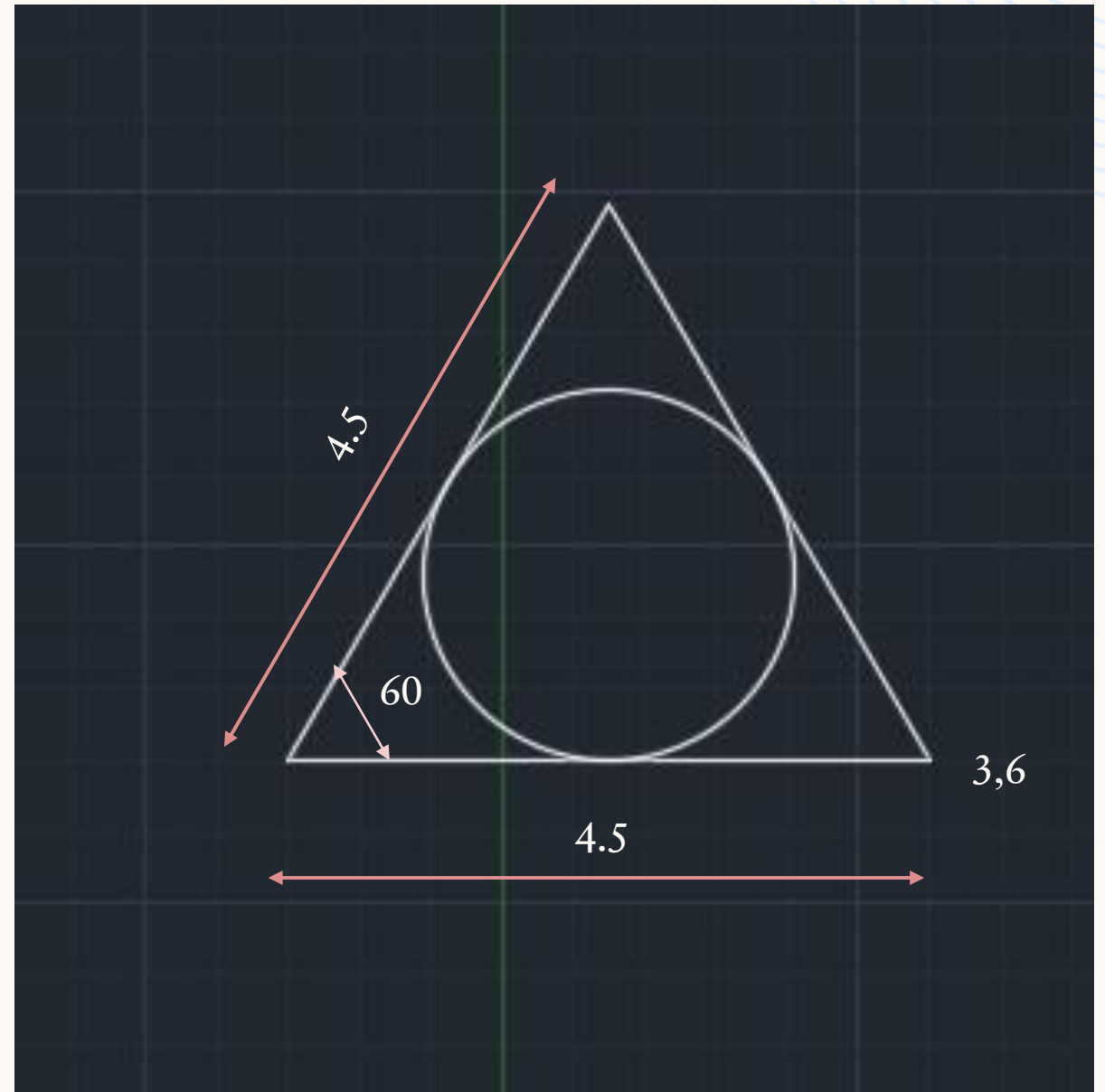
Command: **_circle**

Specify center point for circle or [3P/2P/Ttr (tan
tan radius)]: **_3p** Specify first point on circle:

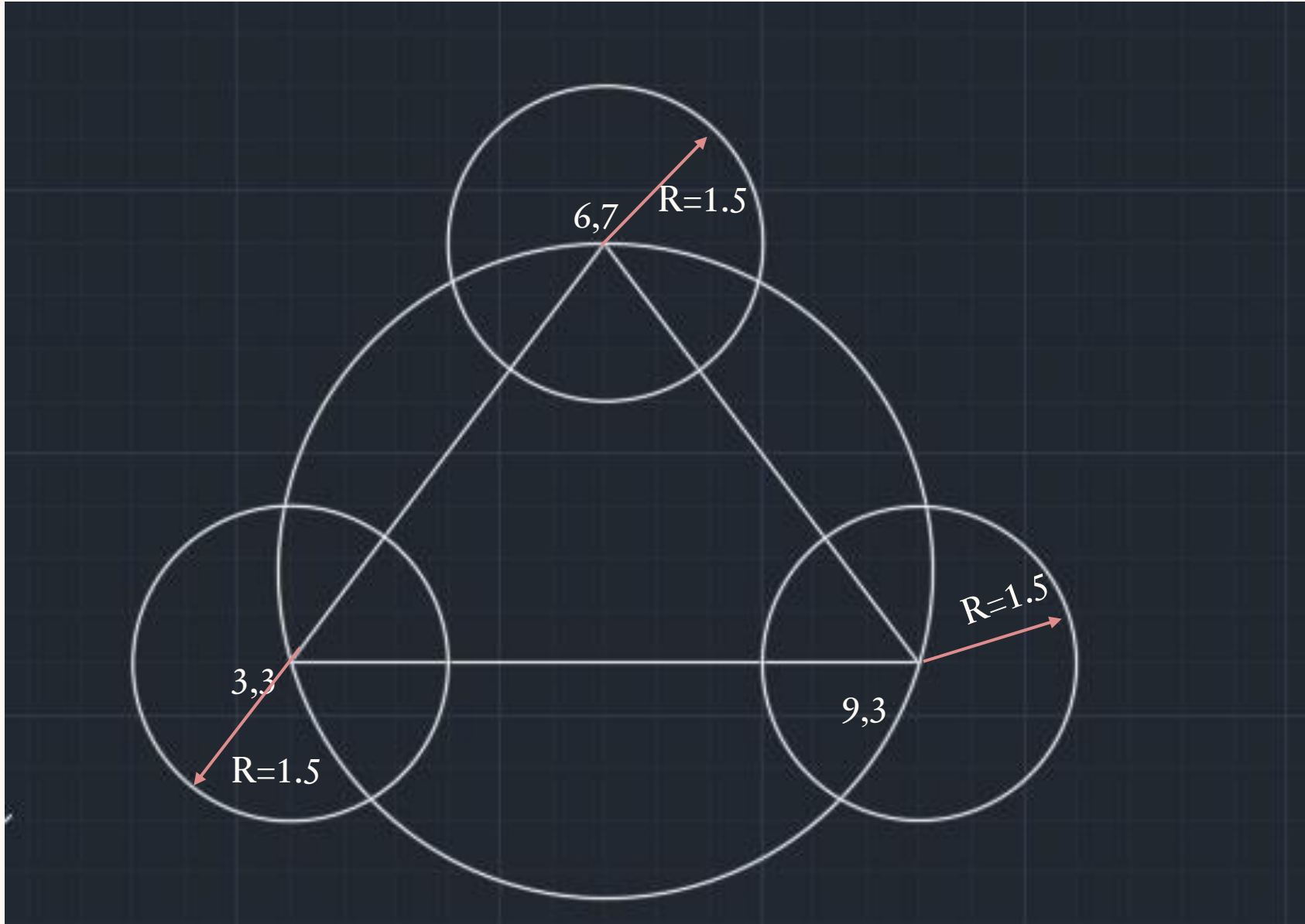
_tan to **select first tangent**

Specify second point on circle: **_tan** to **select**
second tangent

Specify third point on circle: **_tan** to **select third**
tangent



- H.W. Draw the figure below by using different options?



THANK YOU

