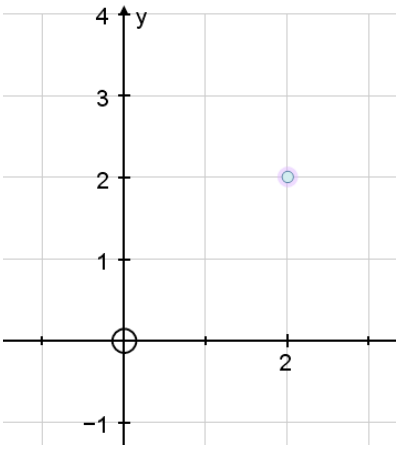
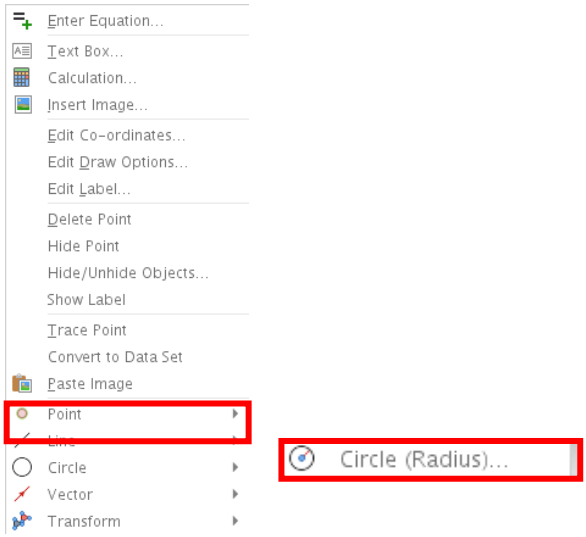
Autograph Webinar
How to: Equation of a Circle

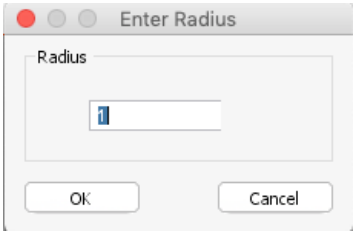
1. Create a **Point** using **Pont Mode**



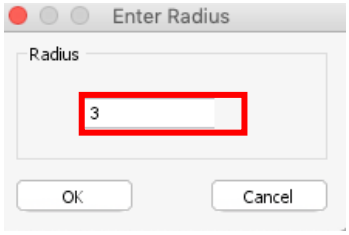
2. Right click and select **Circle** and then select **Circle (Radius)**.



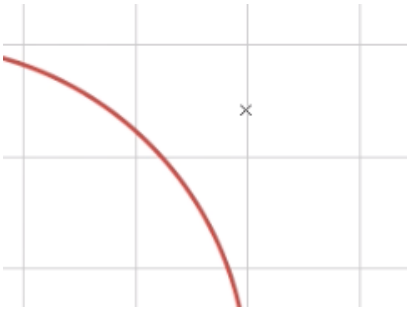
3. The **Enter Radius** dialog box will open.



4. Enter 3 and then click OK. A Circle with radius 3 will be displayed with the point at the centre.



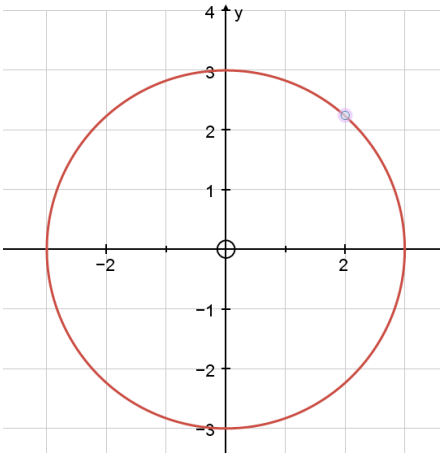
5. Create a point on the Circle using **Point Mode**



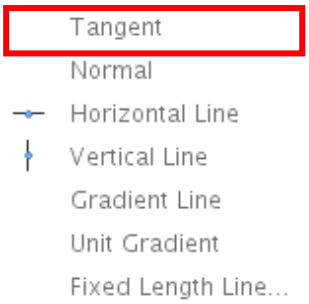
When the point is not going to be on the circle a small cross (x) is displayed.

When the point is going to appear on circumference of
The circle an arrow will be displayed.

5. The **Point** will be displayed on the circle.

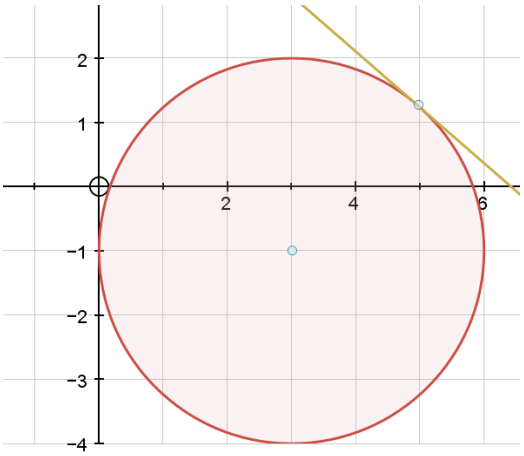


Right click and from the **Line** select **Tangent**.

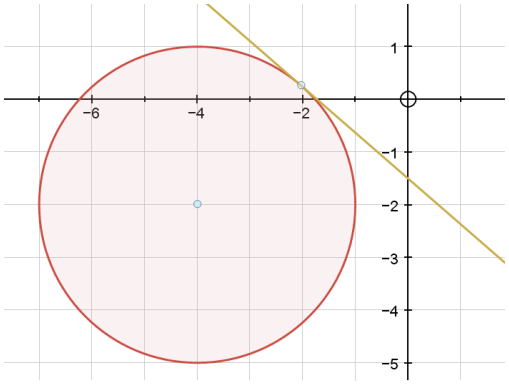


6. The **Tangent** will be displayed on the circle

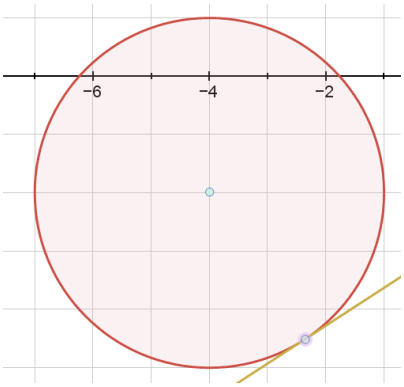
7. The **Tangent** will be displayed on the circle but you can move the circle by moving the centre point



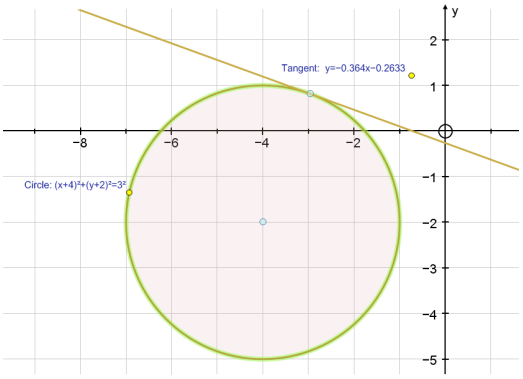
The **Tangent** will still be displayed on the circle.



You can move the **Point** around the circle and the **Tangent** will move around the circle.



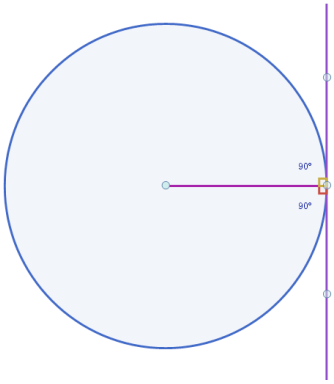
8. Click on the Circle and then **Text Box**. The equation of the circle will be displayed. Repeat for Tangent Equation.



Autograph Webinar
Equation of a Circle: Tasks: 1- 5

1. Create a **Circle** from a point.
Point on the circumference and draw tangent.

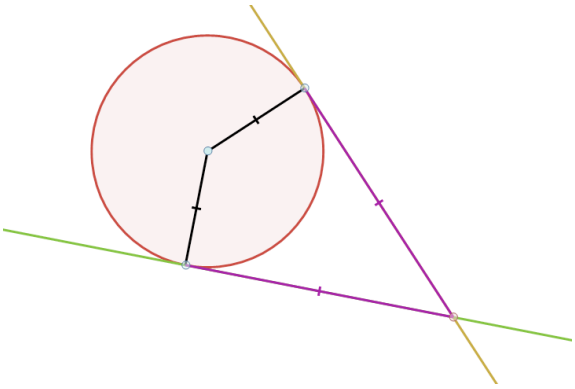
Add in the radius.
Measure both angles.



2. Create a **Circle** and then select **Circle (Radius)**.

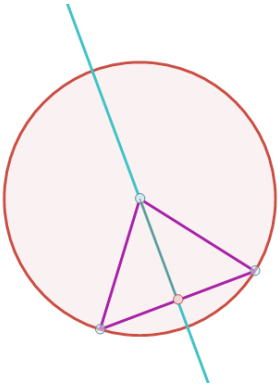
Create two points on circumference.
Create two tangents.

Create an **Intersection Point** where Tangents meet
Perform Line Equality Test on Radius and Tangents



3. Create a **Circle** and then select **Circle (Radius)**.
Create two points on circumference.
Join with a **Line Segment**
Create perpendicular bisector.

What do you notice?



4. Create a diagram that will represent the **Alternate Segment Theorem**.

5. Create a diagram to show that for a right angle triangle inside a circle the hypotenuse is always the diameter.