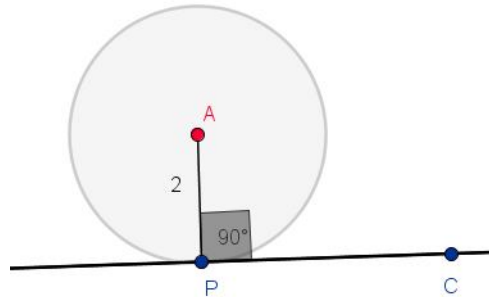


Student Activity Theorem 20

Use in connection with the interactive file called "Theorem 20" on the Student's CD.

To investigate the angle the tangent of a circle, makes with the radius that goes through its point of contact.



1. Which line segment is the radius of the circle and what is its length?

2. What is the name of the line that contains the points P and C?

3. In the interactive file, what is the value of the angle between the tangent and the radius?

4. What happens to the angle between the tangent and the radius when you move the point P around the circle?

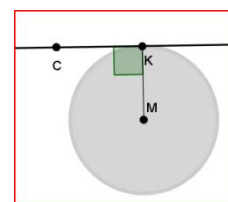
5. What happens to the circle when you move the slider?

6. What happens to the angle between the tangent and the radius when you move the slider?

7. Do you agree that the angle between the tangent and the radius at the point of contact is always 90° ?

Challenges

8. What is the value of the angle MKC in the diagram opposite?



9. How would one tell, if t is a tangent to the circle opposite?

