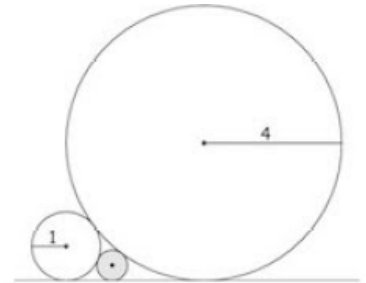


Euclidean Geometry

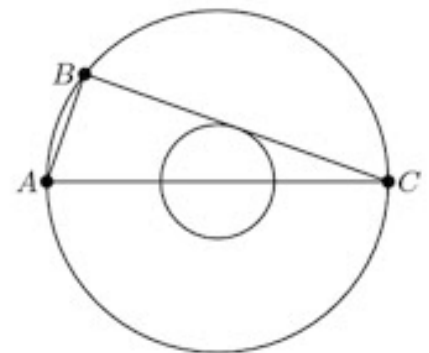
Lectures

Proving The Angle Bisector Theorem

1. Given that the circles on the picture shown are tangent to each other, find the radius of the smallest circle. [Solution](#)
2. Given a circle and an external point P , construct the tangent lines to the circle from P . [Solution](#)



3. The two circles shown on the picture have the same center and their radii are in a ratio of 3 to 1. In triangle ABC , side AC is a diameter in the larger circle and side BC is tangent to the smaller circle. Side AB is 18 units long. Find the exact value of the length of side AC [Solution](#)



4. Find the area of the shaded region. [Solution](#)

