

Circles Worksheet 4

1. How many points does a tangent have in common with a circle?
2. How many lines can be drawn tangent to a circle at a single point on that circle?
3. How many tangents may be drawn to a circle from a point outside the circle?
4. What is the angle created by a tangent and the radius of a circle?
5. What is the relationship between two tangents drawn end either endpoint of a circle's diameter?
6. Two tangents are drawn from a shared exterior point A to a circle. The points of tangency are B and C . What is the relationship between \overline{AB} and \overline{AC} ?
7. Two tangents are drawn from a shared exterior point A to $\odot O$. The points of tangency are B and C . What is the relationship between $\angle OAB$ and $\angle OAC$?
8. What is the relationship between two tangents drawn to radii with a central angle between them of 90° ?
9. If a regular polygon is circumscribed about a circle, what is the relationship between the sides of the polygon and the circle?
10. Point A is on the exterior of $\odot O$ and point B is on $\odot O$. If $AB = 5$, $BO = 12$, and $AO = 13$, is \overline{AB} a tangent to $\odot O$?