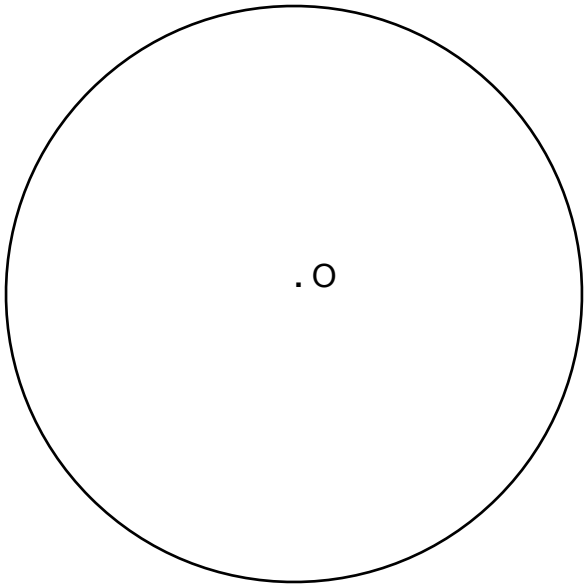
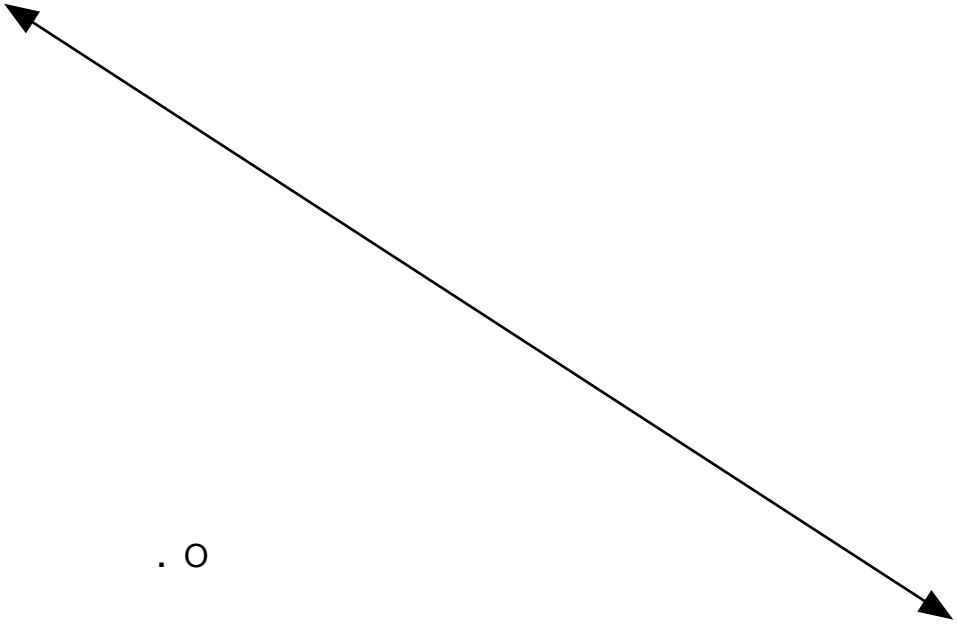
Honors Geometry Constructions **Name:**

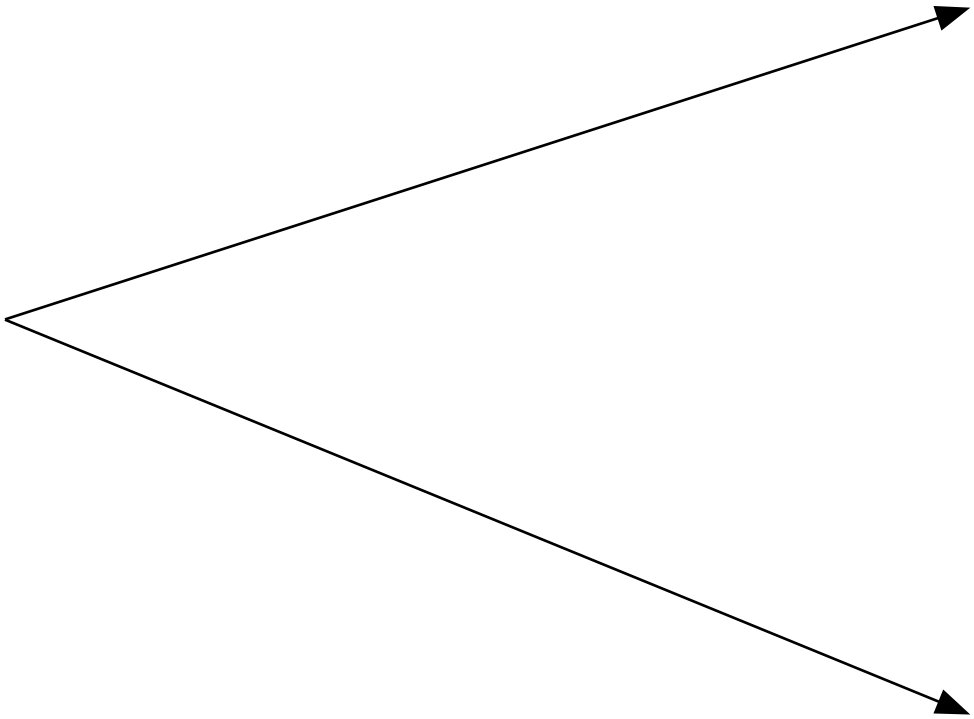
1. Construct two tangents from point P to circle O.



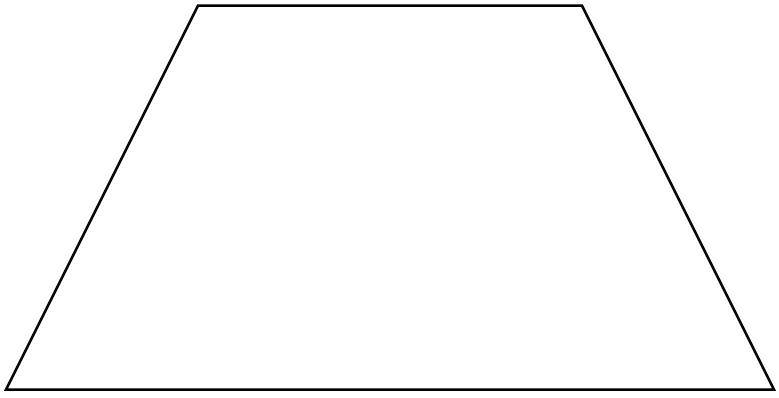
2. Construct a circle with center O tangent to the line shown.



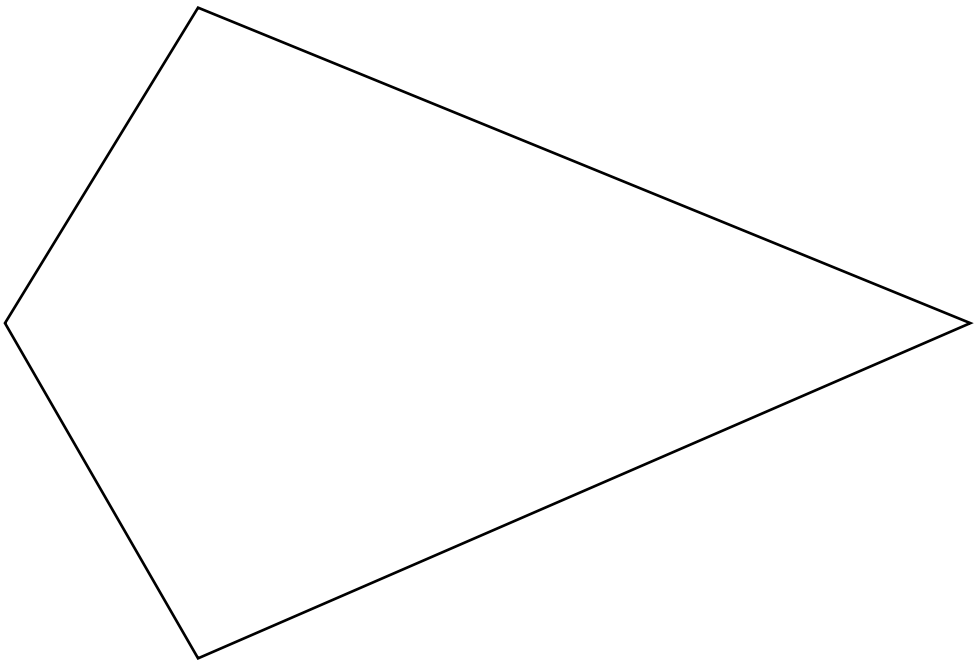
3. Construct a circle with radius r: _____ ,tangent to the two rays below. (*Hint: construct a line parallel to one of the rays at a distance of r)*



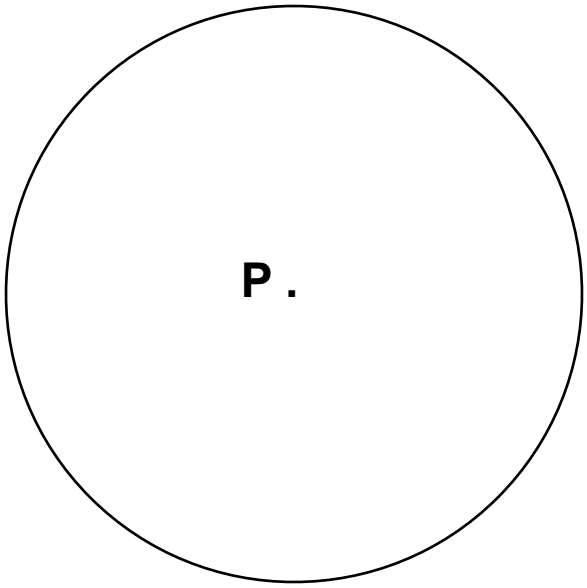
4. Construct a circumscribed circle for the isosceles trapezoid below.



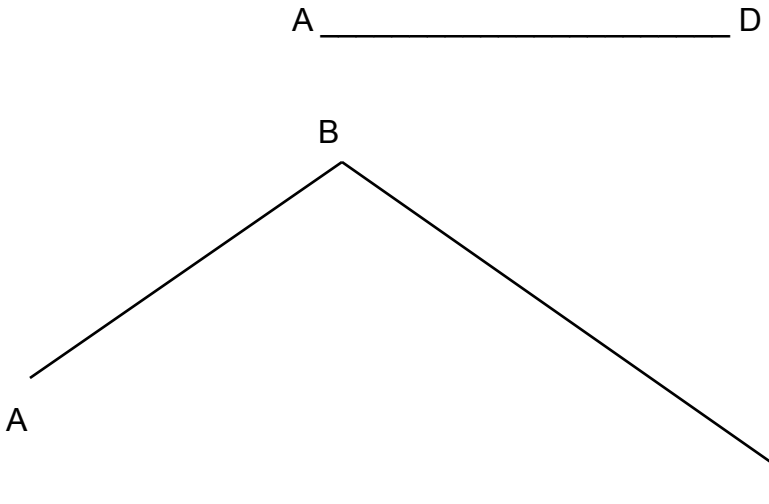
5. Construct an inscribed circle for the kite below. Remember to *construct* the points of tangency, not estimate (*hint: you will need to construct a perpendicular)*.



6. Construct a square around the circle below.



7. Points A, B, and C are all vertices of a cyclic quadrilateral. Construct the location of point D if the length of $\overline{AD}$ is as shown below.



8. Construct a circle tangent to the three segments below.