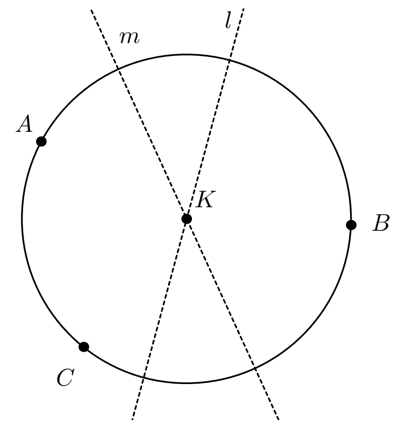
Here is an example of a construction:

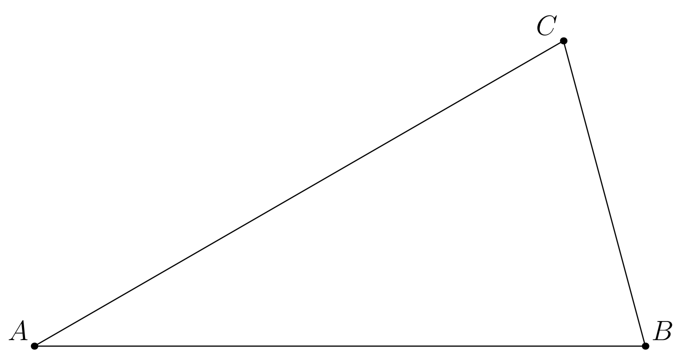


Given: Points A, B, and C
Construct: $\odot K_A$ such that the circle includes all three points.
Game Plan: K is the intersection of the perpendicular bisectors of two sides of $\triangle ABC$. (Note $\triangle ABC$ is not needed for the construction.)
Steps:

1. line $l =$ `PerpBisector`$[A, B]$
2. line $m =$ `PerpBisector`$[B, C]$
3. $K = l \cap m$
4. $\odot K_A$ QEF

Why it Works: A circle is the locus of all points some distance r from the circle. The center of the desired circle is the point equidistant to A, B, and C. Any point on a perpendicular bisector is equidistant to the end points. Any point on l is equidistant to A and B. Similarly, any point on k is equidistant to B and C. So the intersection, K is equidistant to all three points.

1. Given $\triangle ABC$, construct a circle inscribed in the triangle. (**GGB Workday 1** problem 2).



2. Given a circle O and point P in the exterior, construct the two segments from P tangent to the circle.

   (**GeoGebra Workday 1** problem 3).