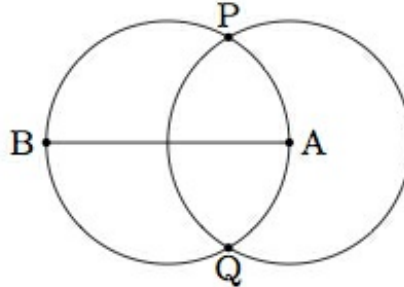


G-CO Inscribing an equilateral triangle in a circle

Task

Suppose we are given a circle of radius r . The goal of this task is to construct an equilateral triangle whose three vertices lie on the circle. Suppose \overline{AB} is a diameter of the circle. Draw a circle with center A and radius r and label the two points of intersection of the circles P and Q as pictured below:



- Show that $m(\angle ABP) = 30$ and $m(\angle ABQ) = 30$.
- Show that $\triangle PBQ$ is an equilateral triangle inscribed in the given circle.



G-CO Inscribing an equilateral triangle in a circle
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