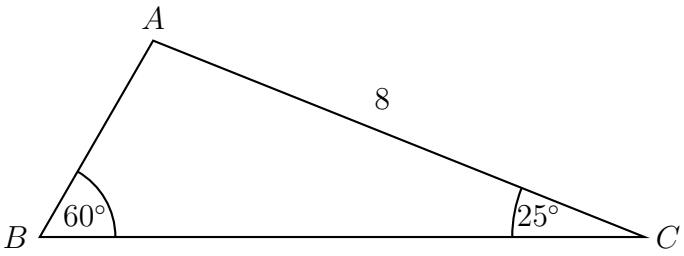
BECA / IB Math 6 Geometry Name:
17 March 2022

6.3 The Law of Sines **HSG.SRT.D.8**

1. The following diagram shows triangle ABC, with $A\hat{B}C = 60°$, $A\hat{C}B = 25°$, and $AC = 8$ cm.

   Find AB.

   diagram not to scale

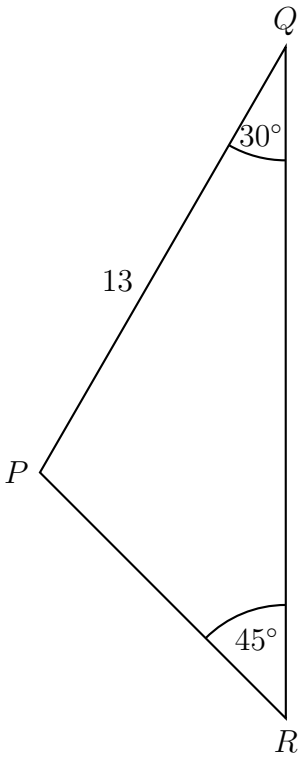


2. The following diagram shows triangle PQR.

   $Q\hat{R}P = 45°$, $P\hat{Q}R = 30°$, and $PQ = 13$ cm.

   Find PR.

   diagram not to scale

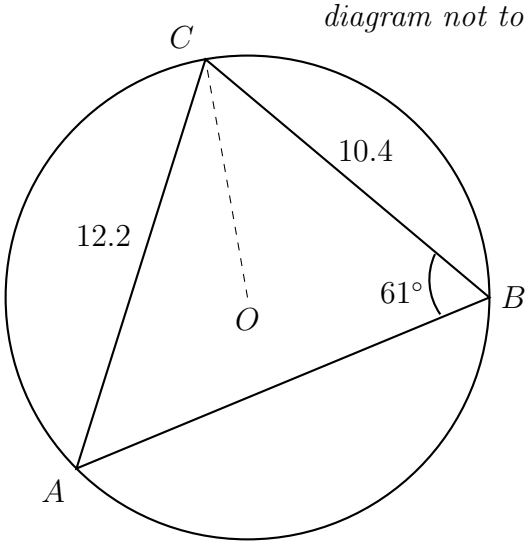


3. Consider a circle with centre O and radius 7 cm. Triangle ABC is drawn such that its vertices are on the circumference of the circle.

   $AC = 12.2$ cm, $BC = 10.4$ cm, and $A\hat{B}C = 61°$.

   Find $B\hat{A}C$.

diagram not to scale



4. The following diagram shows triangle ABC, with $A\hat{B}C = 48°$, $A\hat{C}B = 37°$, and $BC = 11.5$ cm.

   Find AB.

diagram not to scale