$\rm BECA$  / IB Math 6 Geometry 17 March 2022

Name:

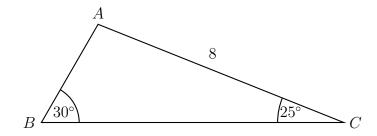
## 6.3 The Law of Sines

HSG.SRT.D.8

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

Find AB.

 $diagram\ not\ to\ scale$ 

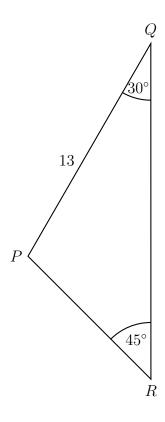


2. The following diagram shows triangle PQR.

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

Find PR.

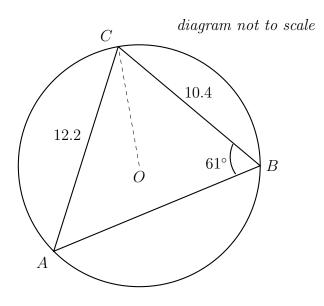
diagram not to scale



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.

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

Find  $B\hat{A}C$ .



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

Find AB. diagram not to scale

