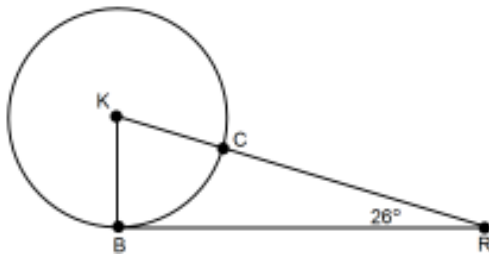


Round answers to the nearest hundredth unless noted otherwise. The center in each circle is pt K. For 1-4 assume that lines that appear tangent to a circle are actually tangent.

1.



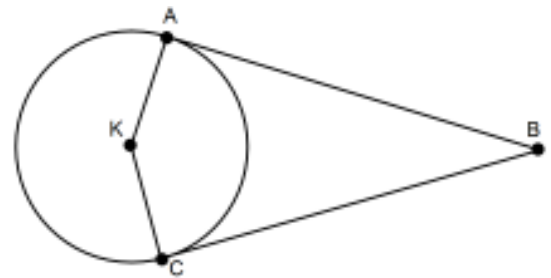
a) Find the measure of Central Angle $\angle BKC$.

$m\angle BKC =$

b) Find the length of \overline{BR} if the radius of $\odot K = 7$ and $CR = 15$.

$BR =$

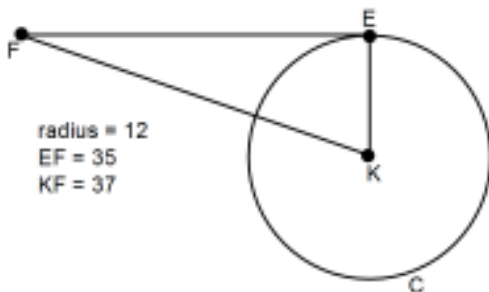
2.



Find the measure of Central Angle $\angle AKC$ if $m\angle ABC = 42^\circ$

$m\angle AKC =$

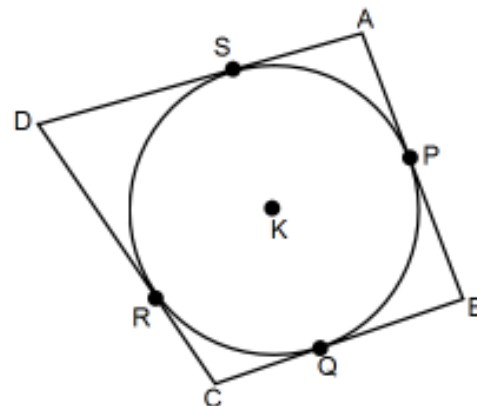
3. Use the given information to determine if \overline{EF} tangent to $\odot K$. Give a reason.



Is \overline{EF} tangent?

Why?

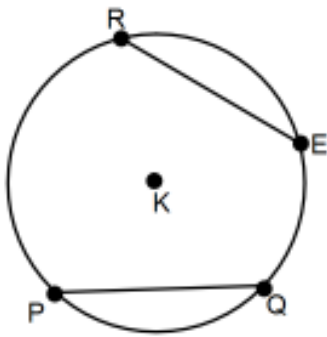
4. Find the perimeter of ABCD. Pts P, Q, R, & S are pts of tangency.



$CD = 17, SA = 6, BP = 8, CQ = 5$

Perimeter =

5.

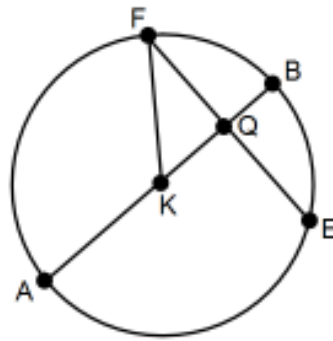


$$\overline{RE} \cong \overline{PQ} \quad m\widehat{QE} = 65^\circ \quad m\widehat{PQ} = 85^\circ$$

Find the measure of \widehat{PR} .

$$m\widehat{PR} =$$

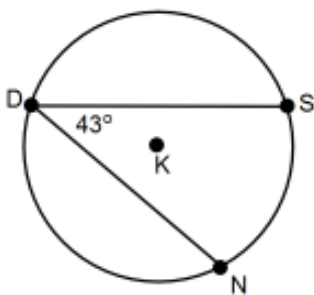
6.



Diameter \overline{AB} is perpendicular to chord \overline{EF} at pt Q . If the radius of the circle is 13 and $EF = 24$, find the length of \overline{KQ} .

$$KQ =$$

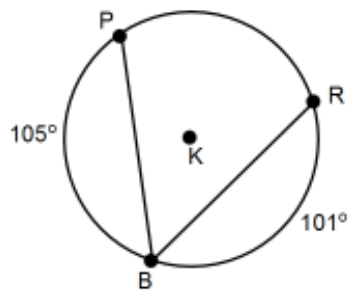
7.



Find the measure of \widehat{SN}

$$m\widehat{SN} =$$

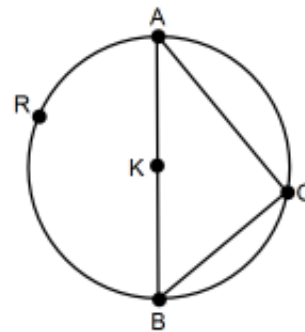
8.



Find the measure of inscribed $\angle PBR$.

$$m\angle PBR =$$

9. \overline{AB} is a diameter.



Find the measure of $\angle ACB$

$$m\angle ACB =$$