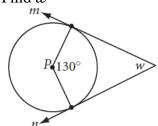
9.5 Angles Related to a Circle

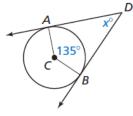
Past due on: _____ Period: ____

The two rays (shown) are tangent to the circle. Find the value of the variable.

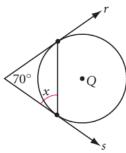
1. Find w



2. Find *x*

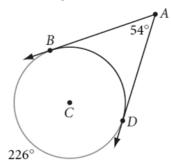


3. Find *x*

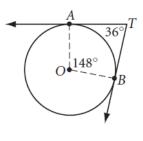


Identify and explain what is wrong with the picture.

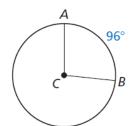
4. $\overrightarrow{AB} \& \overrightarrow{AD}$ are tangent to $\bigcirc C$.



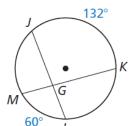
5. $\overrightarrow{TA} \& \overrightarrow{TB}$ are tangent to $\bigcirc O$.

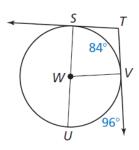


6. Which angles have the same measure as $\angle ACB$? Select ALL that apply.



D 96°

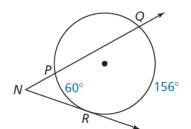


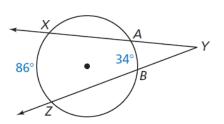


∠DEF ∠JGK ∠KGL

 $\angle LGM \quad \angle QNR \quad \angle STV$

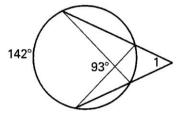
 $\angle SWV$ $\angle VWU$ $\angle XYZ$



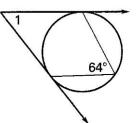


Find $m \angle 1$. (These involve multiple steps.)

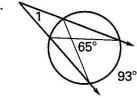
7.



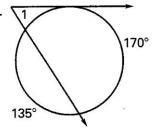
8.



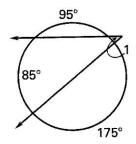
9.



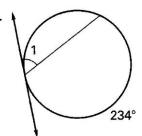
10. 5



11.

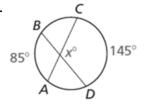


12.

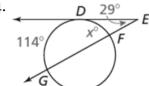


Set up and solve an equation to find the value of x.

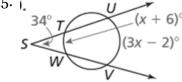
13.



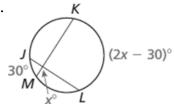
14.



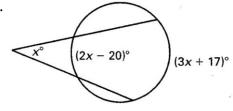
15. 1.



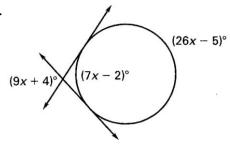
16.



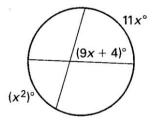
17.



18.



19.



20.

