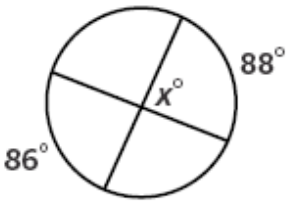
Name: _____

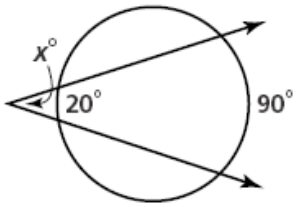
Angles Formed by Tangents, Chords, and Secants

1) Find the value of *x*, verify your answer.

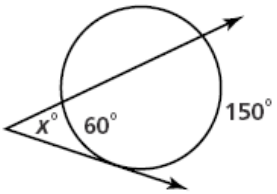
1)



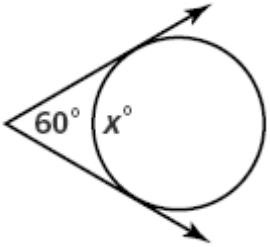
2)



3)



4)



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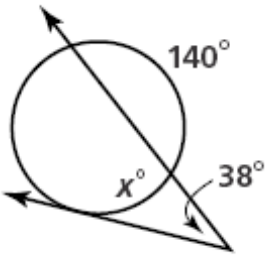
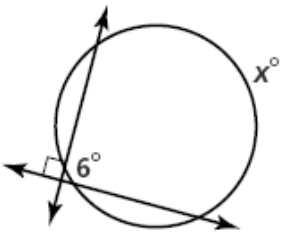
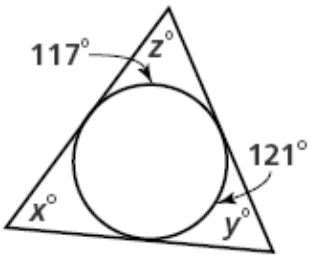


6)

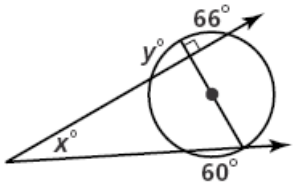


2) Find the value of each variable using the given chords, secants, and tangents.

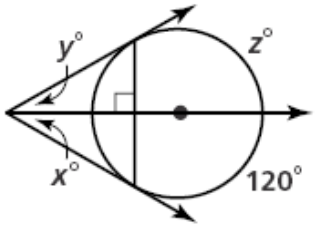
1)



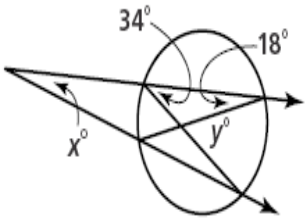
2)



3)



4)



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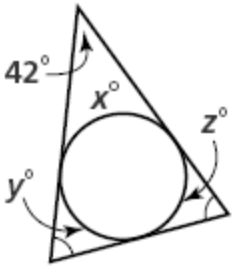
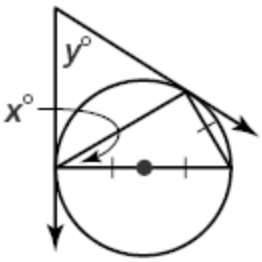
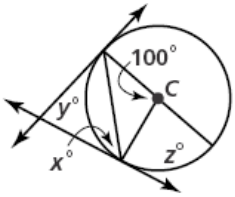


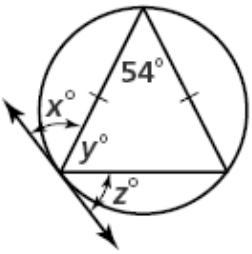
6)



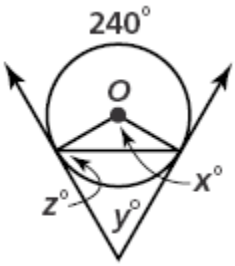
7)



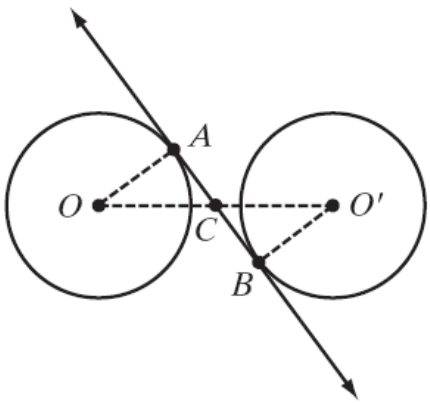
8)



9)



3) Line $\overleftrightarrow{AB}$ is a common internal tangent to circles O and O'. $\overleftrightarrow{AB}$ is tangent to circle O at A and to circle O' at B, and $OA = O'B$. The intersection of $\overline{OO'}$ at $\overleftrightarrow{AB}$ is C.



1) Prove that $OC = O'C$

2) Prove that $AC = BC$