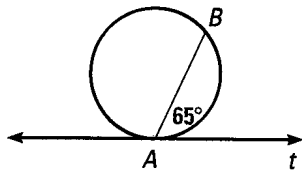


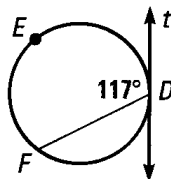
12.5 - Angles of Chords, Secants, and Tangents

If t is the tangent to the circle, find the missing value.

1) $m\widehat{AB}$

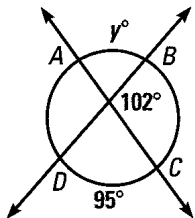


2) $m\widehat{DEF}$

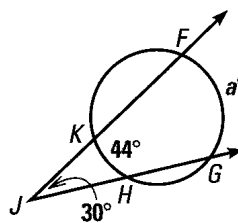


Find the missing degree value.

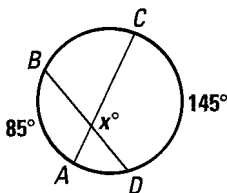
3)



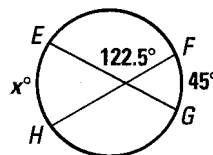
4)



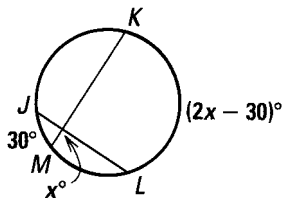
5)



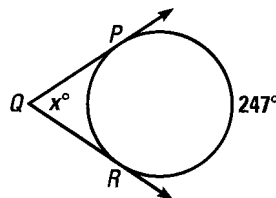
6)



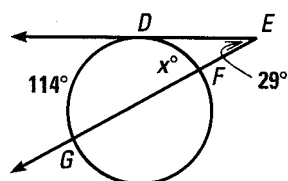
7)



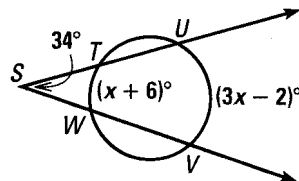
8)



9)



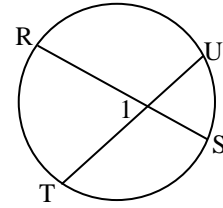
10)



Find the missing length value.

11) If $m\widehat{RT} = 80^\circ$ and $m\widehat{US} = 40^\circ$, then $m\angle 1 =$ _____

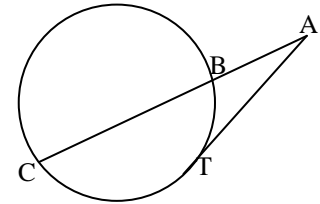
If $m\widehat{RU} = 130^\circ$ and $m\widehat{TS} = 100^\circ$, then $m\angle 1 =$ _____



12) \overline{AT} is a tangent.

If $m\widehat{CT} = 110^\circ$ and $m\widehat{BT} = 50^\circ$, then $m\angle A =$ _____

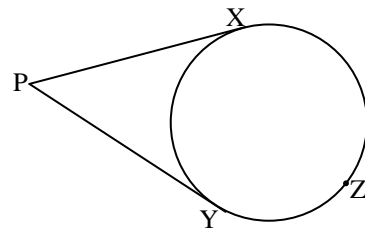
If $m\angle A = 28^\circ$ and $m\widehat{BT} = 46^\circ$, then $m\widehat{CT} =$ _____



13) \overline{PX} and \overline{PY} are tangents.

If $m\widehat{XZY} = 250^\circ$, then $m\angle P =$ _____

If $m\widehat{XY} = 90^\circ$, then $m\angle P =$ _____



14) \overline{BZ} is tangent to circle O; \overline{AC} is a diameter;

$m\widehat{BC} = 90^\circ$; $m\widehat{CD} = 30^\circ$, and $m\widehat{DE} = 20^\circ$.

$m\angle 1 =$ _____ $m\angle 6 =$ _____

$m\angle 2 =$ _____ $m\angle 7 =$ _____

$m\angle 3 =$ _____ $m\angle 8 =$ _____

$m\angle 4 =$ _____ $m\angle 9 =$ _____

$m\angle 5 =$ _____ $m\angle 10 =$ _____

