9.1

Circles and Spheres

Circle: _____

_____

Given Point:_____ Given distance:_____

Radius: _____

_____

Chord: _____

Secant: _____

Diameter: _____

Tangent: _____

Pt. of Tangency: _____

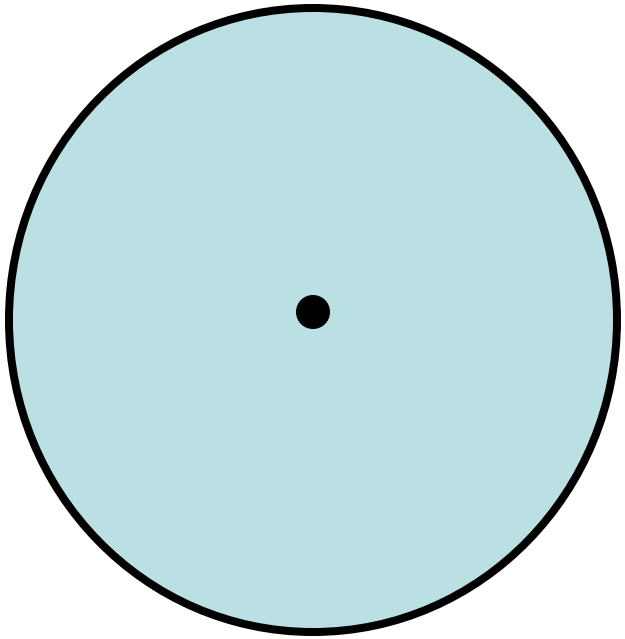
_____

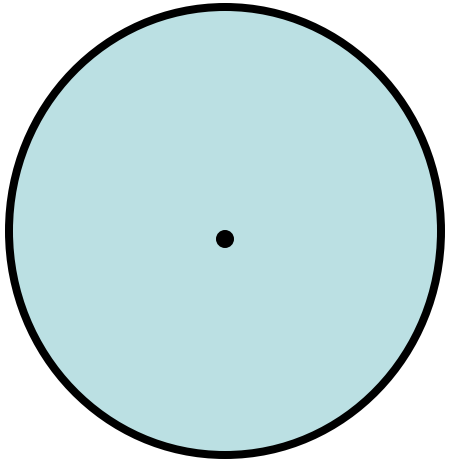
Sphere: _____

_____

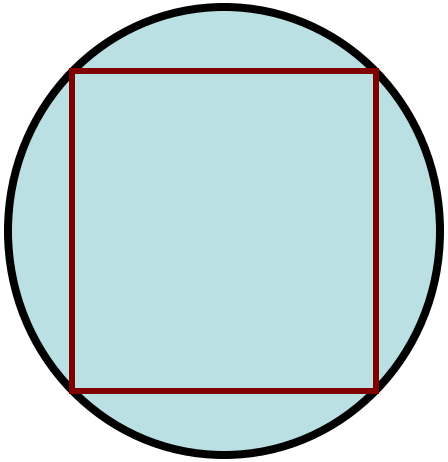
Congruent circles: _____

Concentric Circles: _____





Concentric Circles



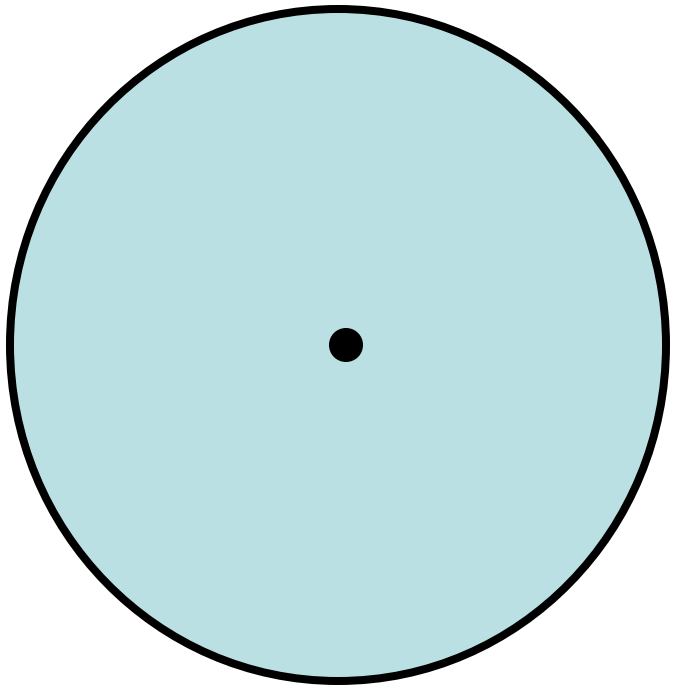
9.2

Tangents

Theorem 9.1: _____

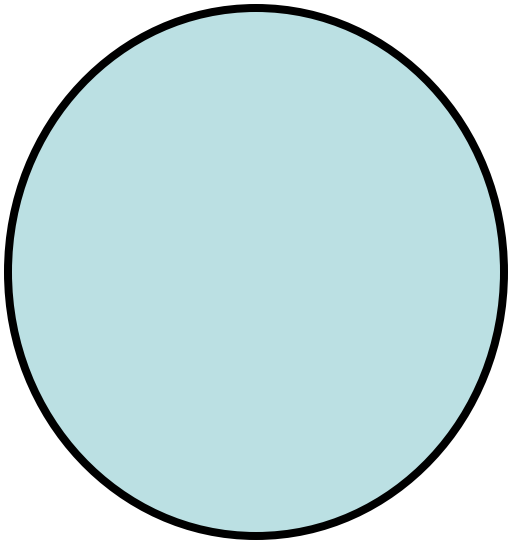
_____

_____



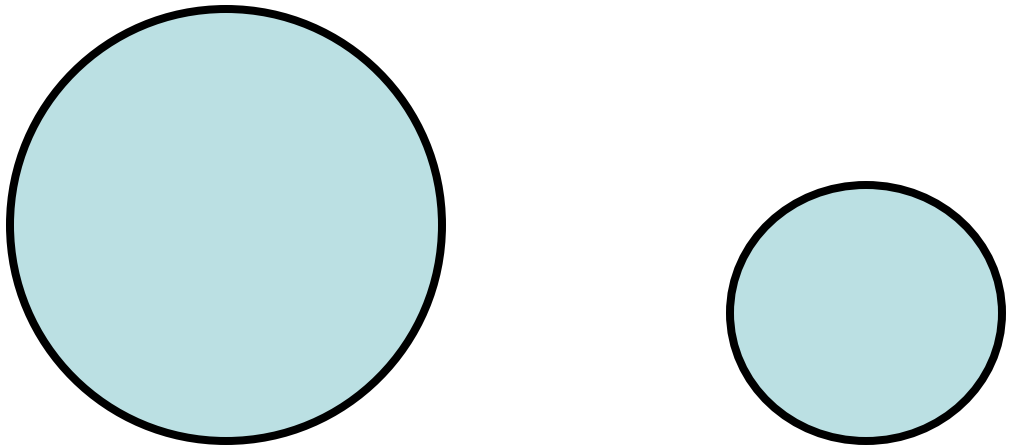
Corollary: _____

_____



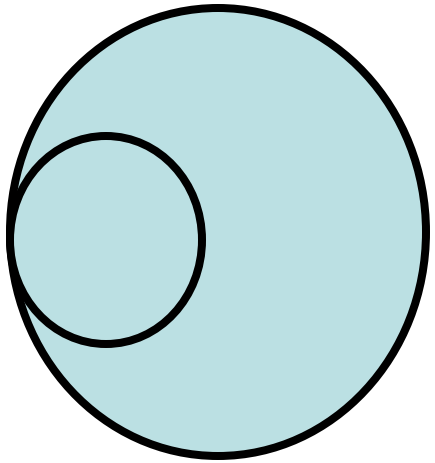
Common Tangent: _____

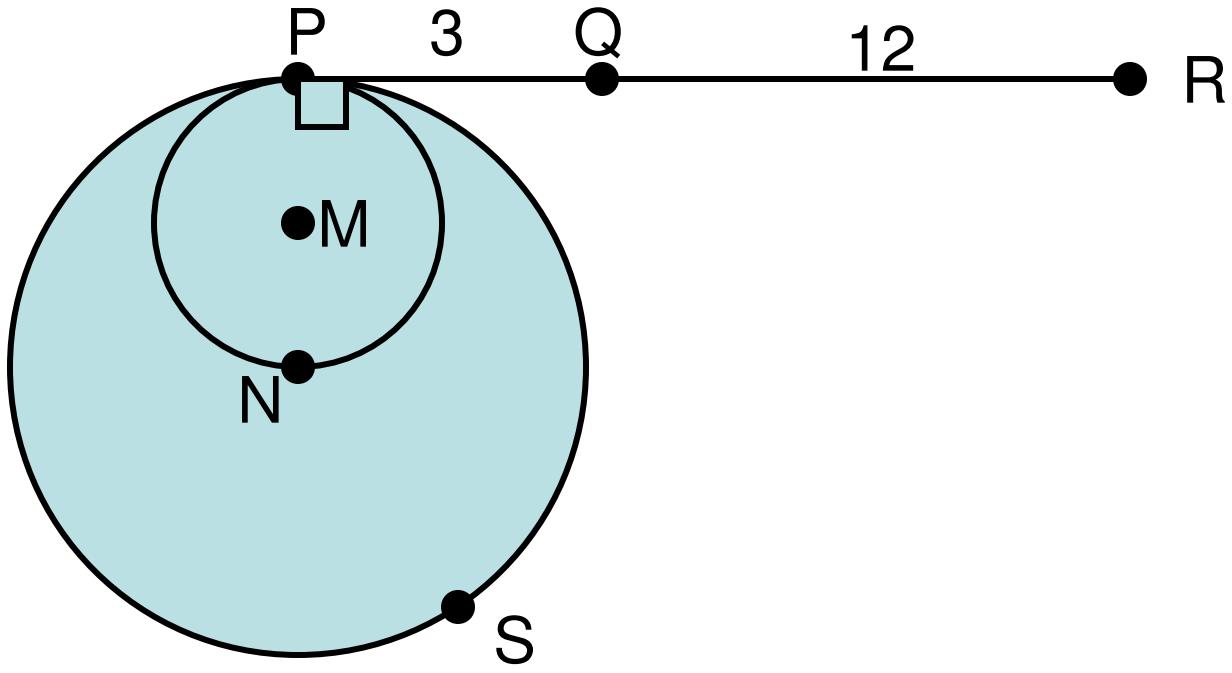
_____



Tangent Circles: _____

_____

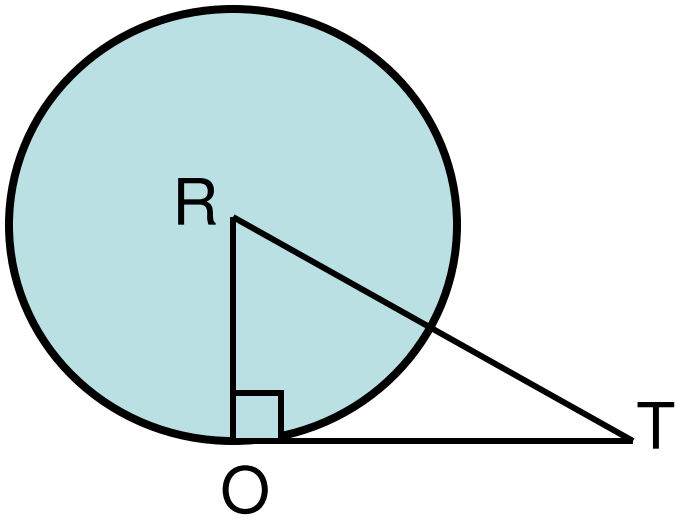




M & N are centers and P is a pt of tangency.

Find: PM=____; MQ=_____; PR=____

SR=____; NS =_____; NR=_____



If OR=6 and TO=8 then TR=_____

If angle T= 45 degees and OT=4 then Tr=____

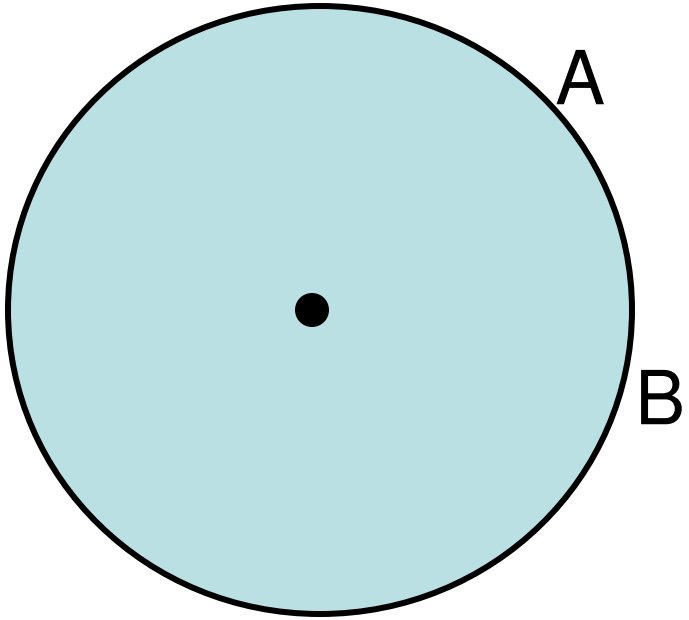
9.3

Arcs and Central Angles

Central Angle: _____

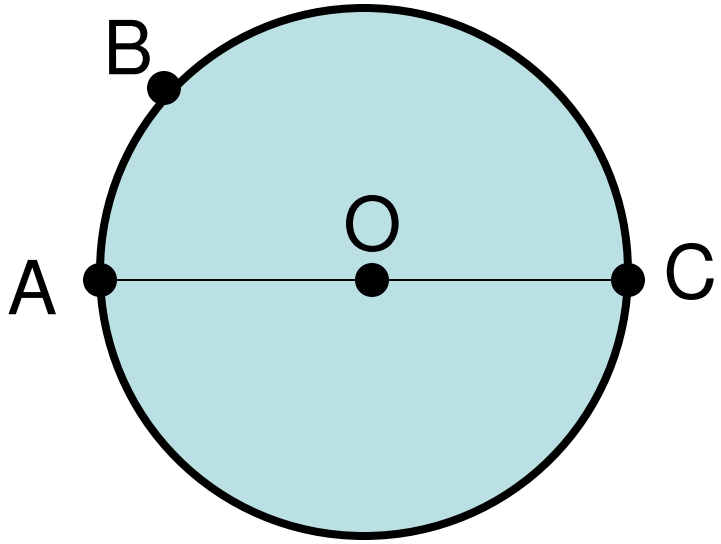
_____

Arc: _____



Different Arcs:

- Minor Arc: _____
- Major Arc: _____
- Semi Circle: _____



Minor Arc = _____

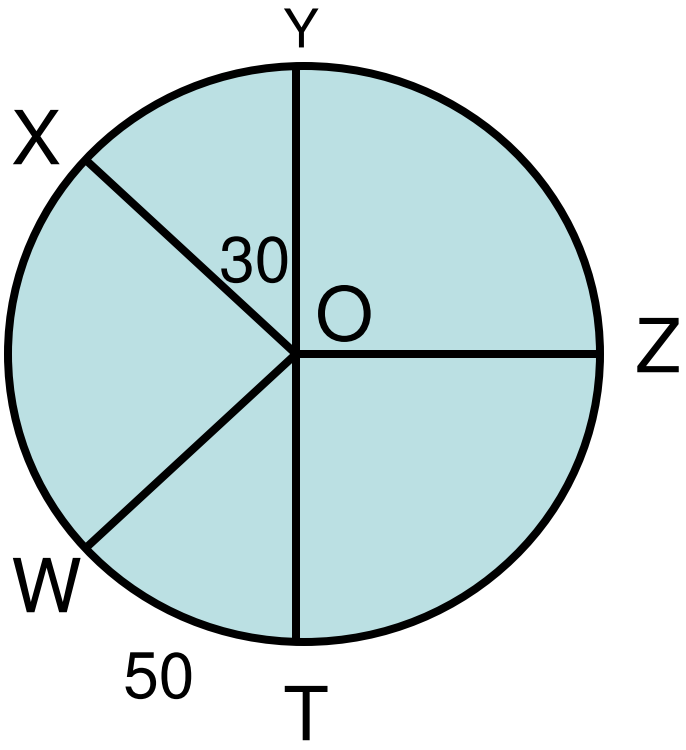
Major Arc = _____

Semicircle = _____

Theorem 9.3: _____

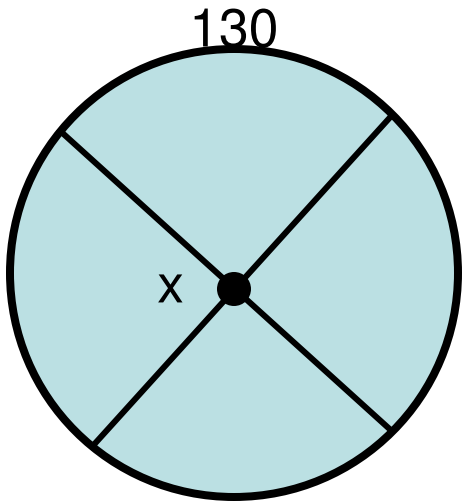
_____

_____

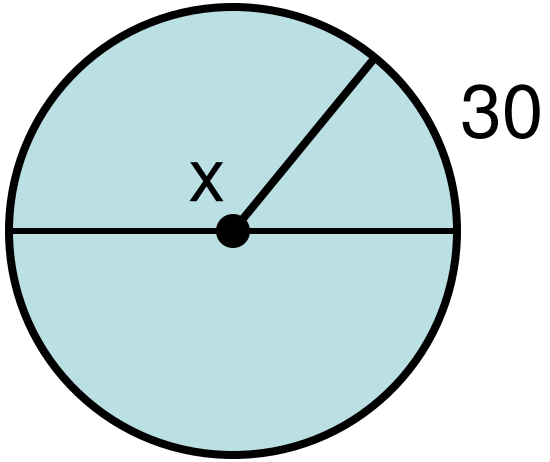


Find $\overset{\frown}{XY}$ = _____; m∠WOT=_____

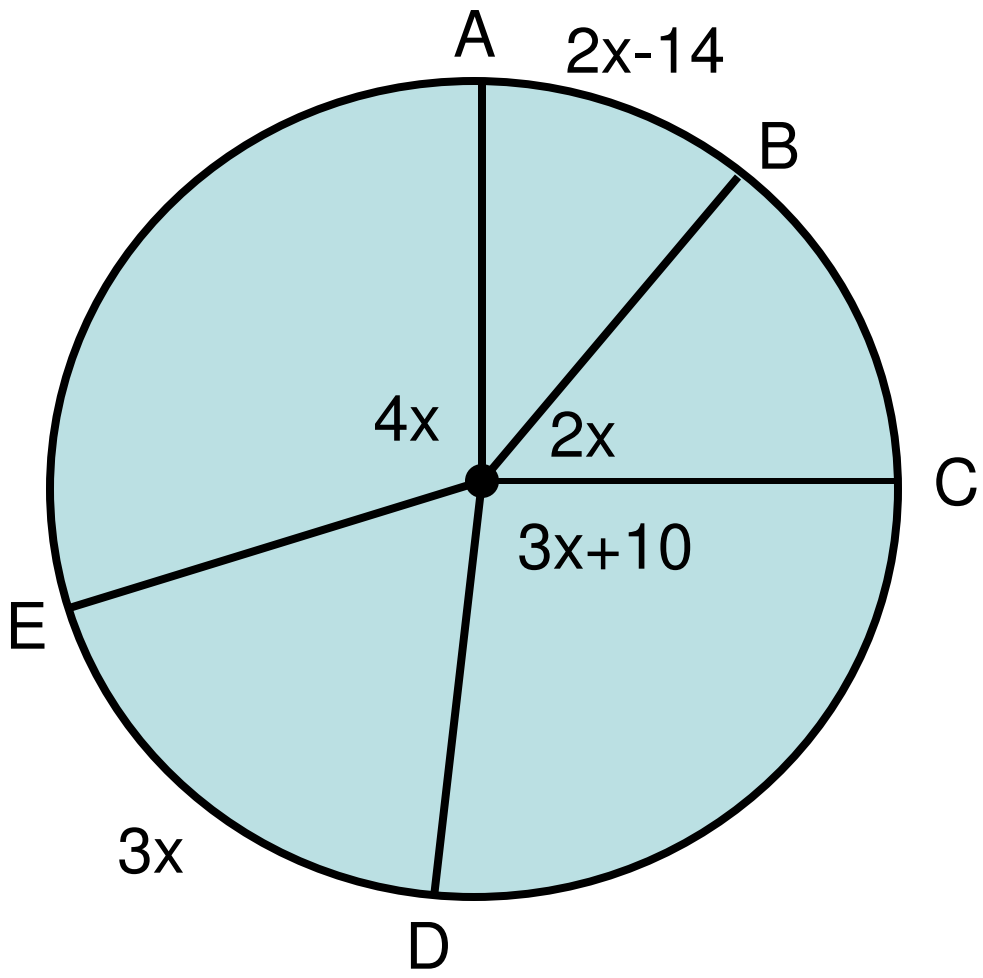
$\overset{\frown}{XYT}$ = _____; $\overset{\frown}{WX}$ = _____



X=_____



X=_____



Solve for x=_____

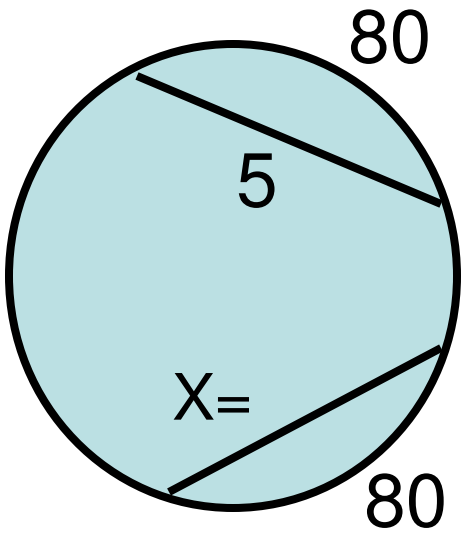
9.4

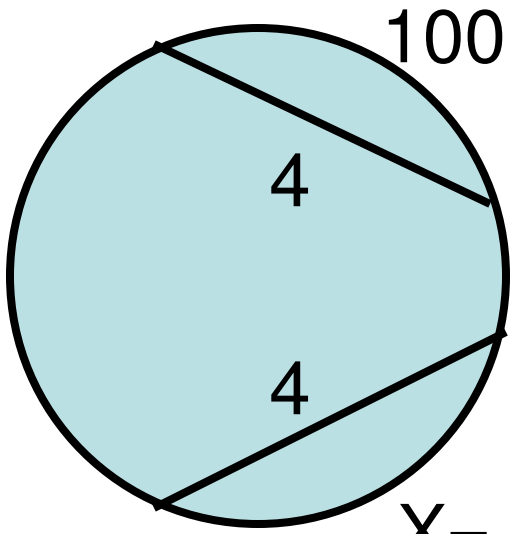
Arcs and Chords

Theorem 9.4 : _____

_____

- _____
- _____



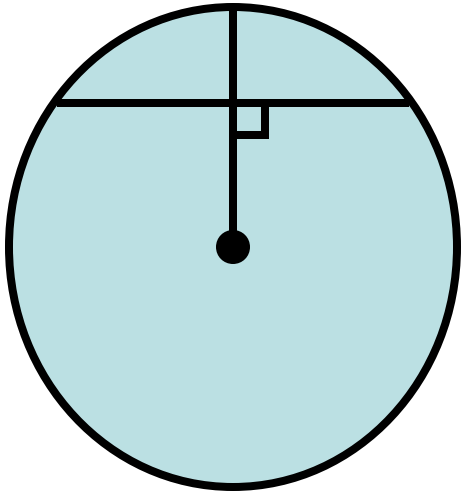


X=____

Theorem 9.5 : _____

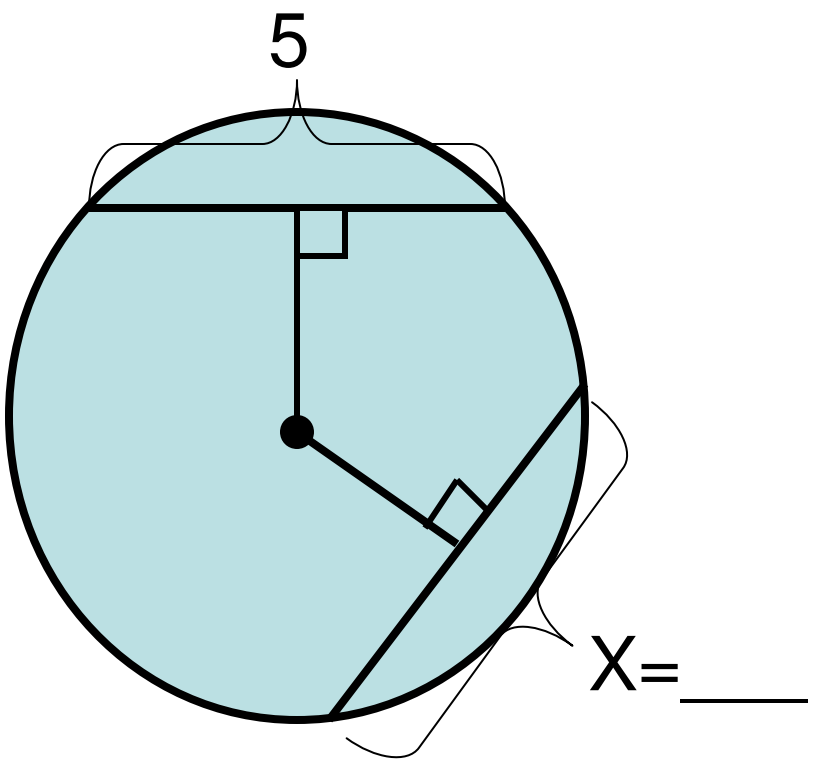
_____

- _____
- _____

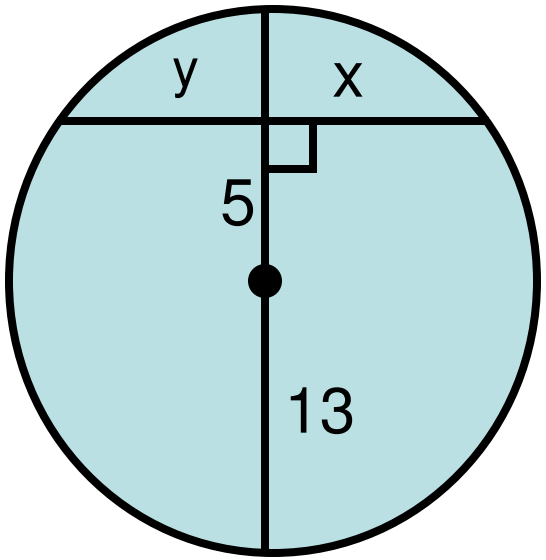


Theorem 9.6 : _____

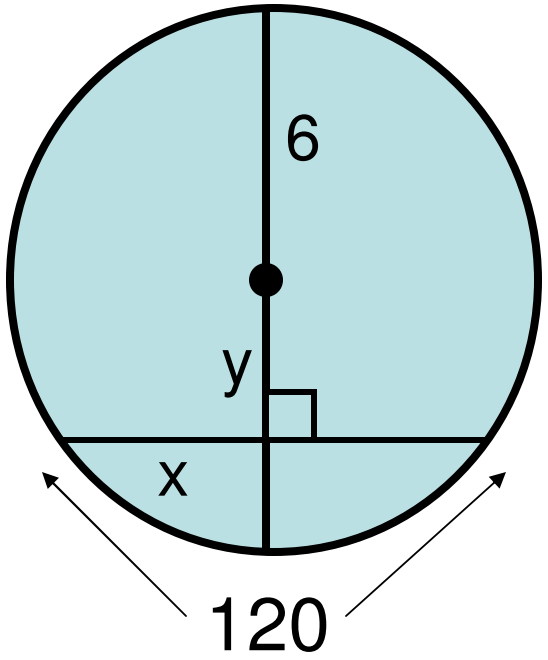
- _____
- _____



Examples:

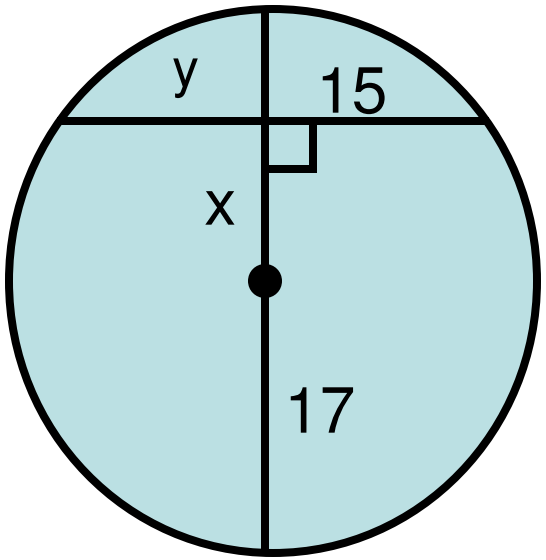


Find: x=____ y=____

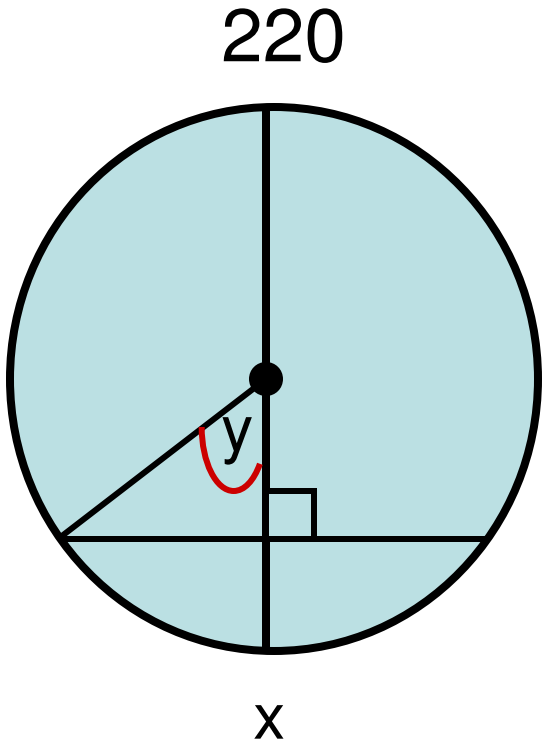


Find: x=____ y=____

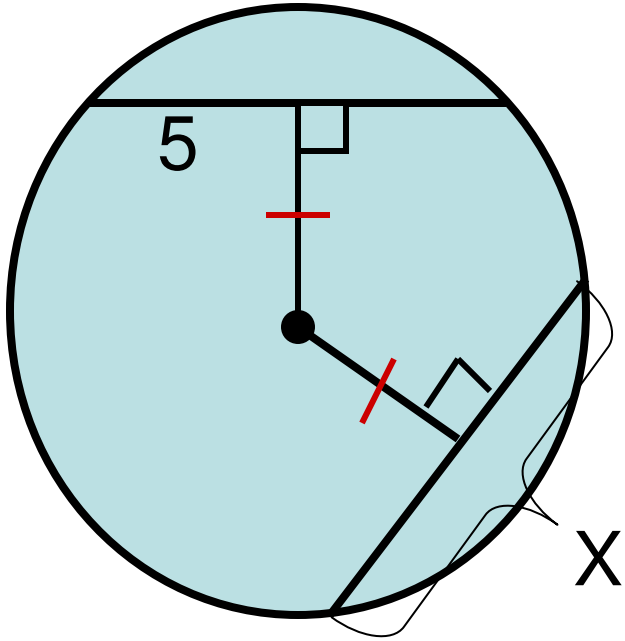
Examples:



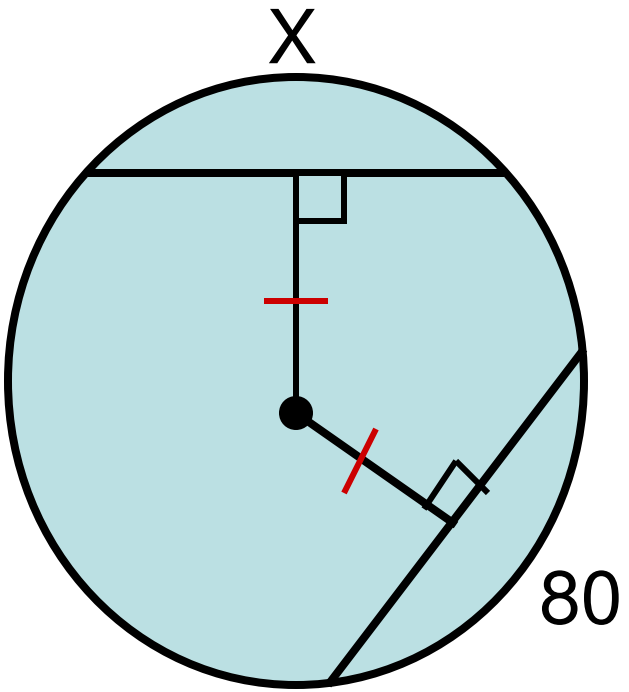
Find: x=____ y=____



Find: x=____ y=____



X=___



X=___

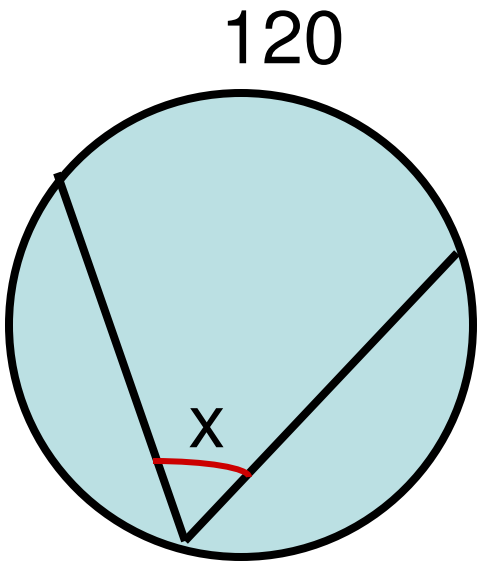
9.5

Inscribed Angles

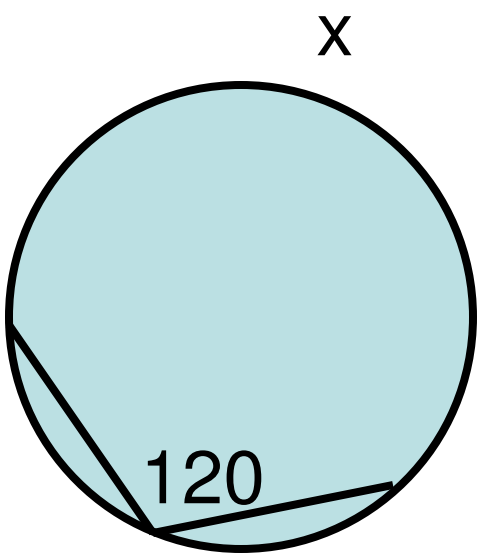
Inscribed Angle: _____

_____

- _____



X=_____



X=_____

Corollary 1: _____

_____

Corollary 2: _____

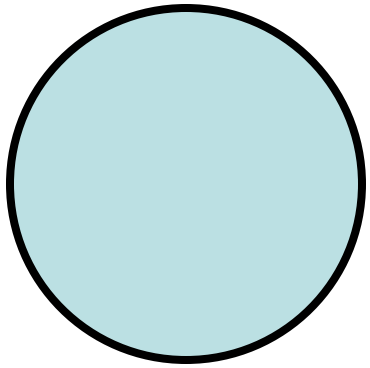
_____

Corollary 3: _____

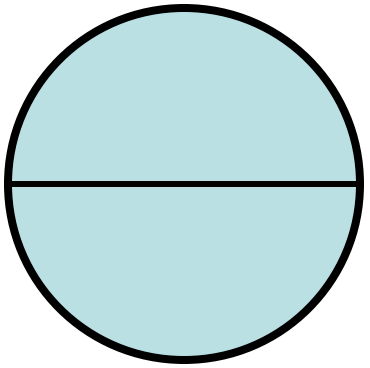
_____

_____

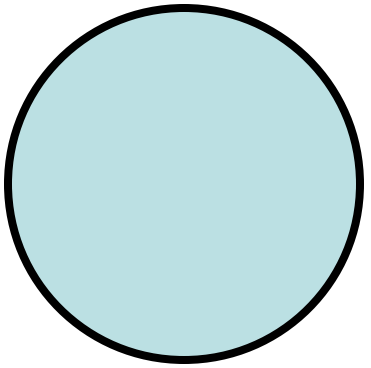
Corollary 1



Corollary 2



Corollary 3

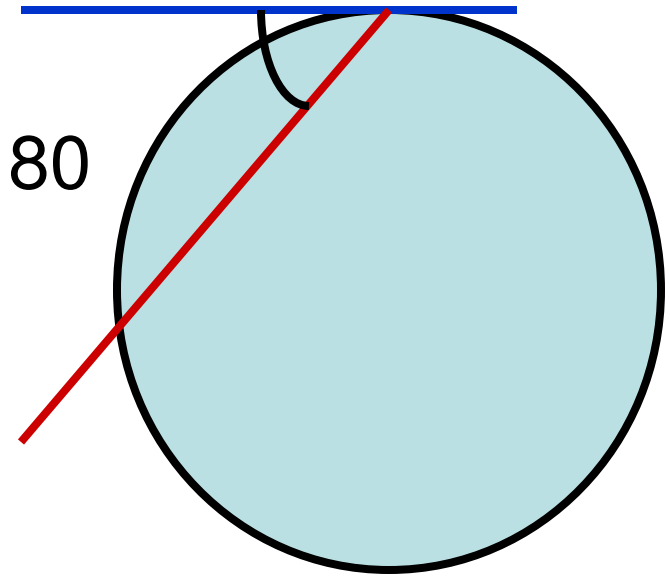


Special Inscribed Angle

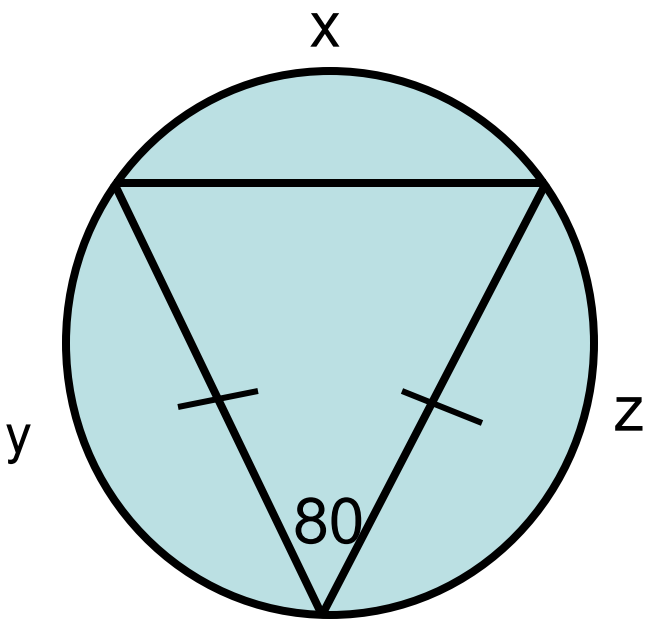
Theorem 9.8 : _____

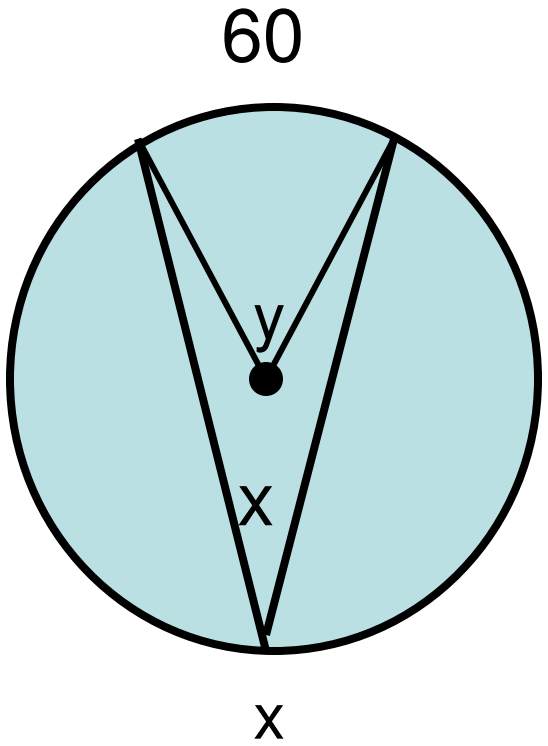
_____

_____



Examples:

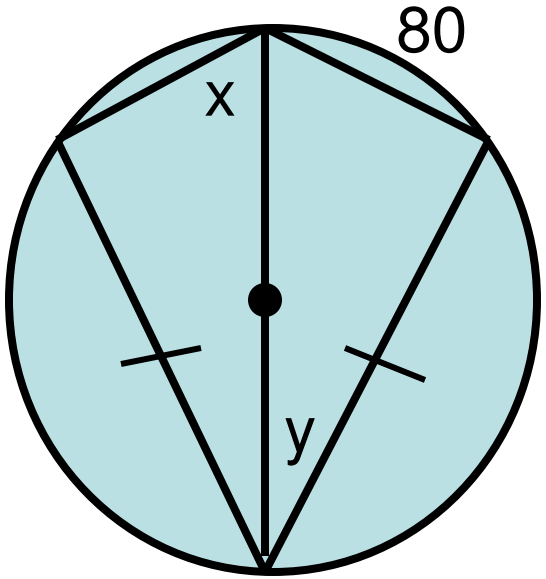




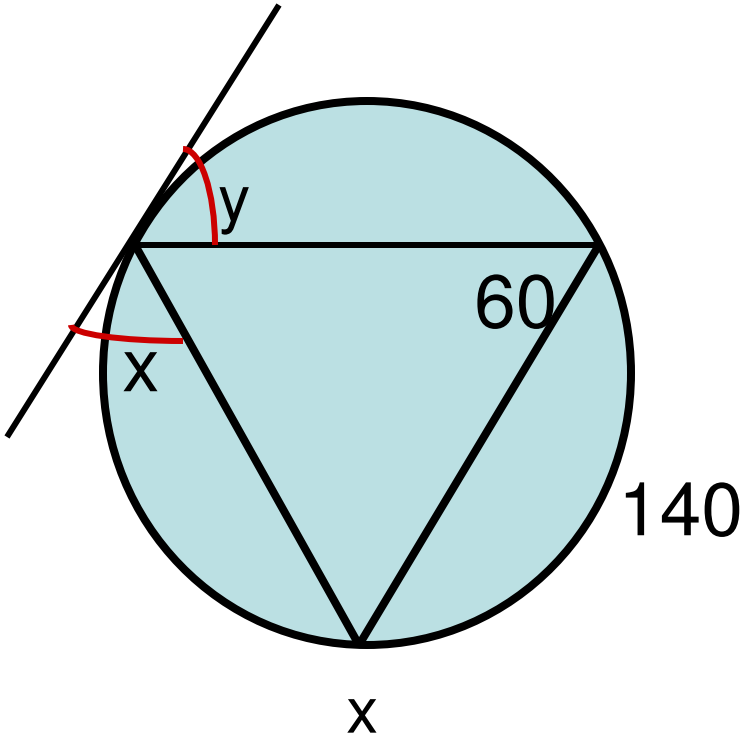
x=____ y=____ z=____

Find: x=____ y=**60**

Examples:

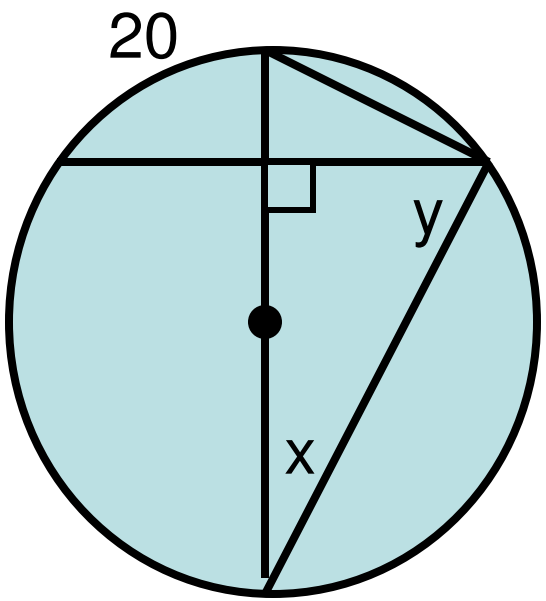


y=_____ x=_____

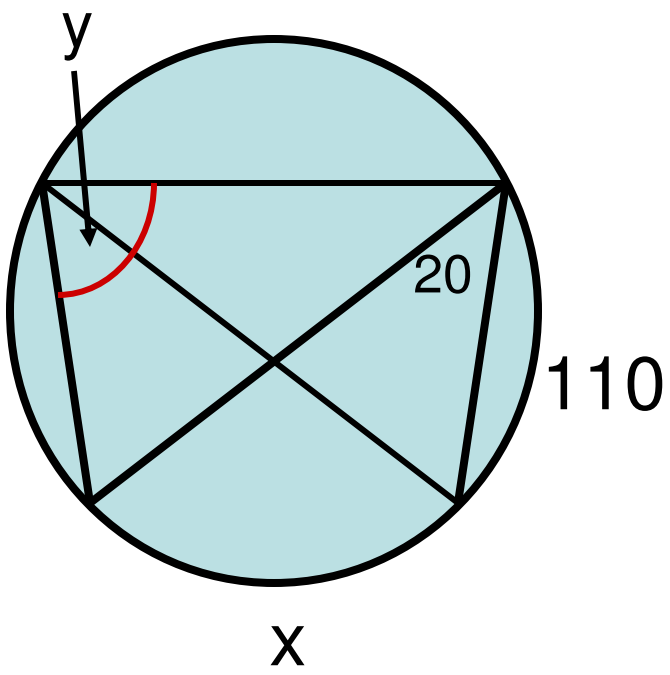


Find: x=_____ y=_____

Examples:



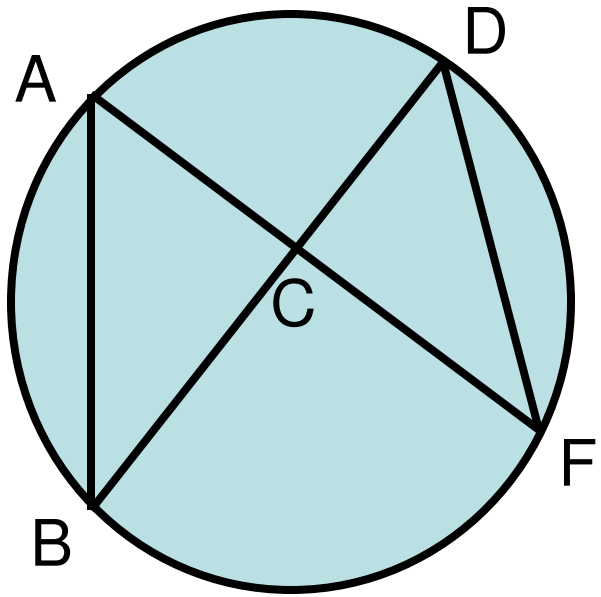
x=_____ y=_____



Find: x=_____ y=_____

Given: None

Prove: $\triangle ACB \sim \triangle DCF$



1.	1. Given

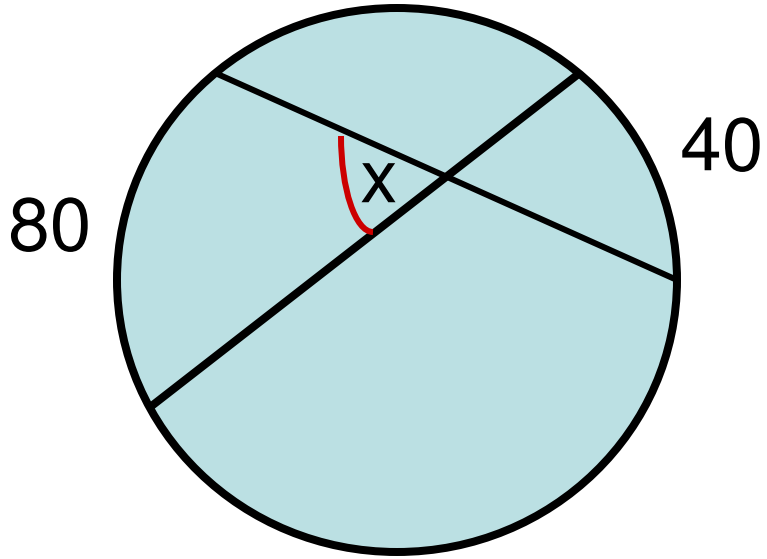
9.6

Other Angles

Inside Angle: _____

_____

_____

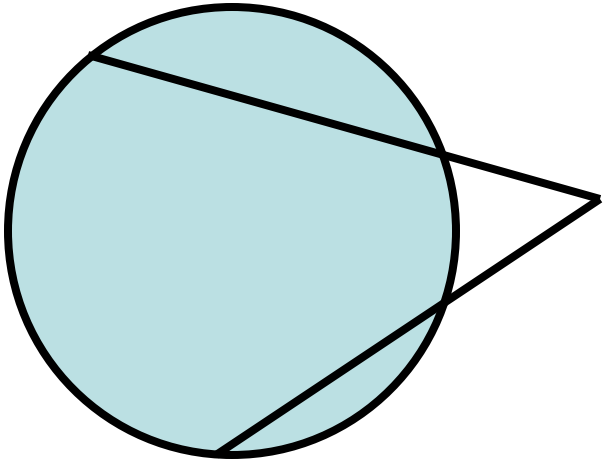


Outside Angle: _____

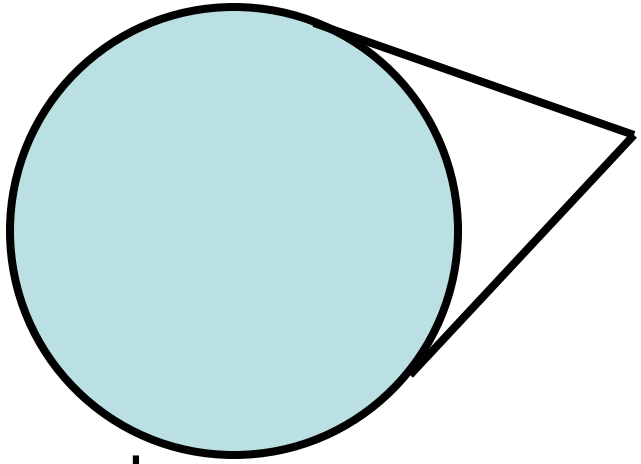
_____

_____

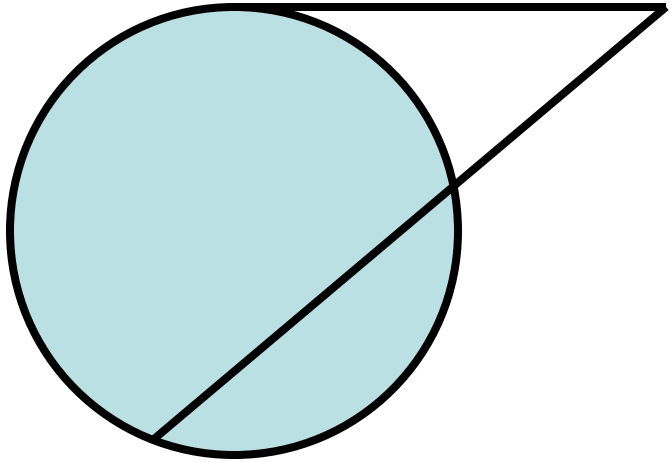
2 secants



2 Tangents

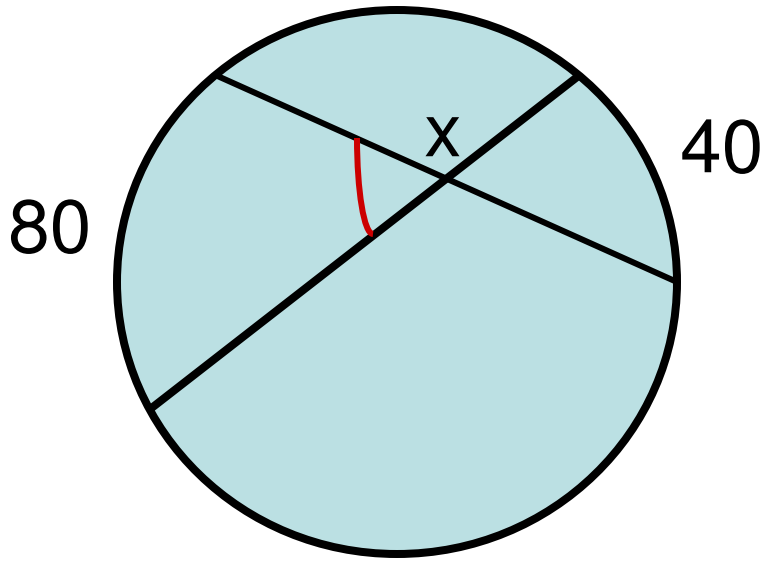


Secant & Tangent

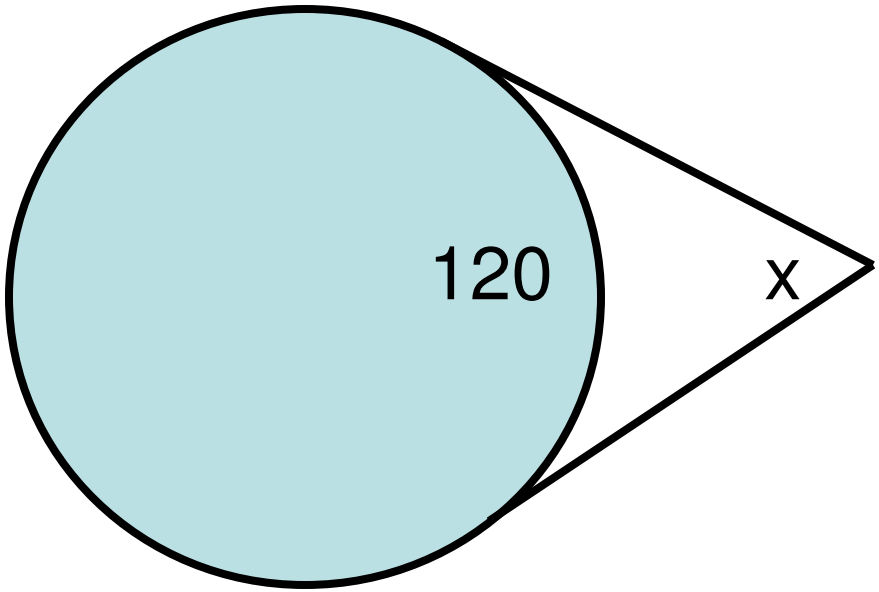


Solve for x:

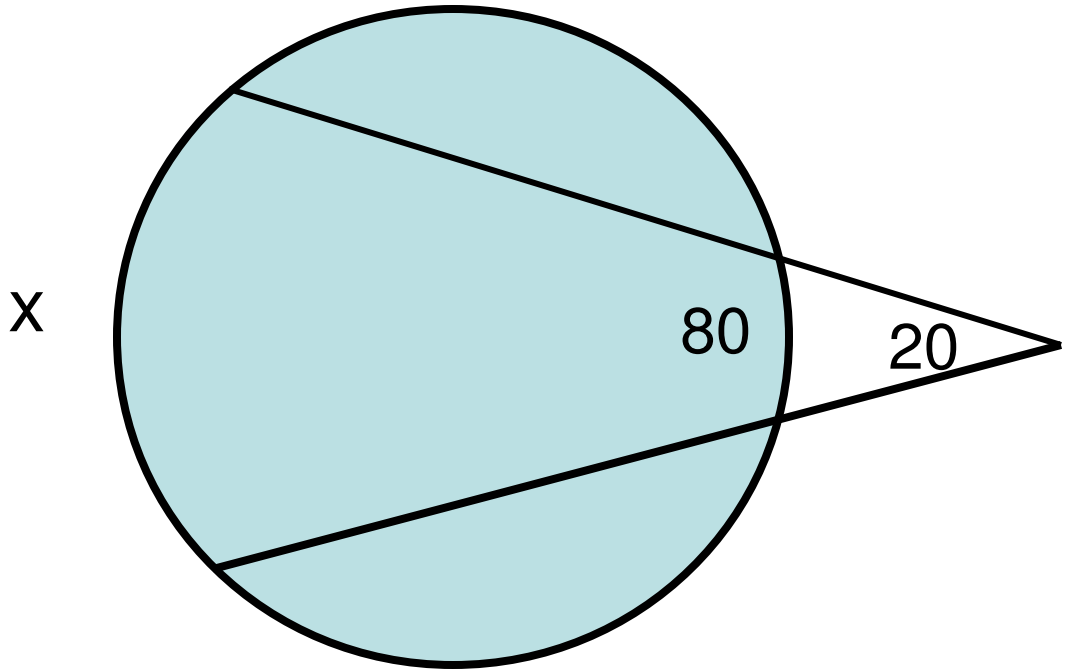
First solve for the inside angle



Find x:



Find x:



9.7

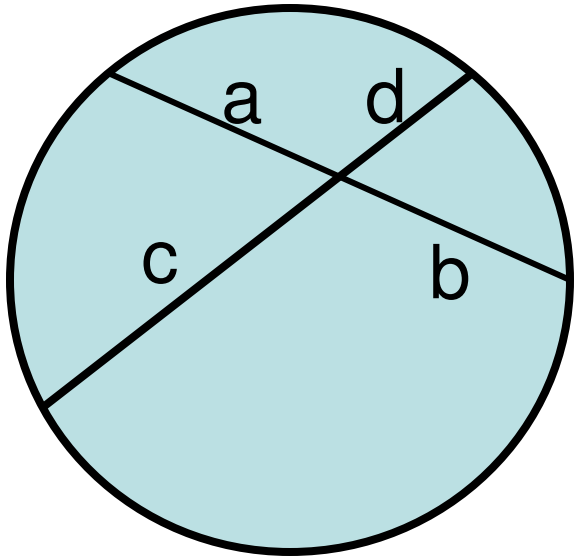
Circles and Lengths of Segments

Theorem 9.11: _____

_____

_____

_____

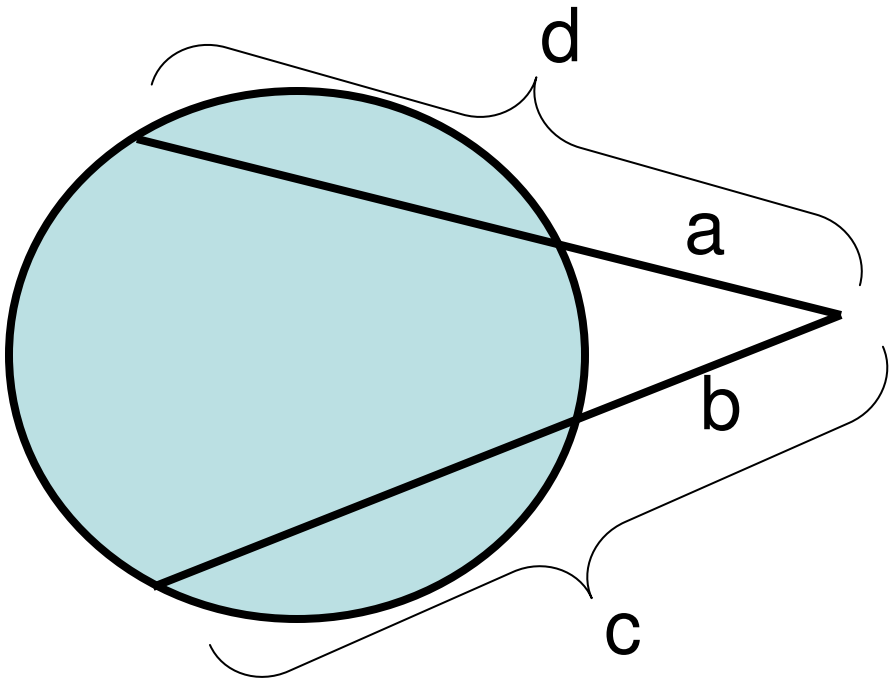


Theorem 9.12: _____

_____

_____

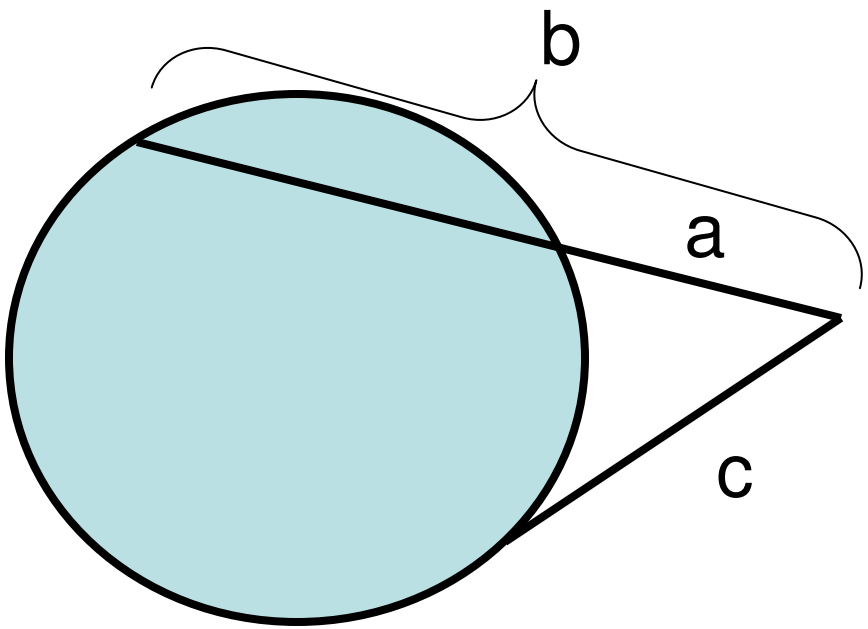
_____



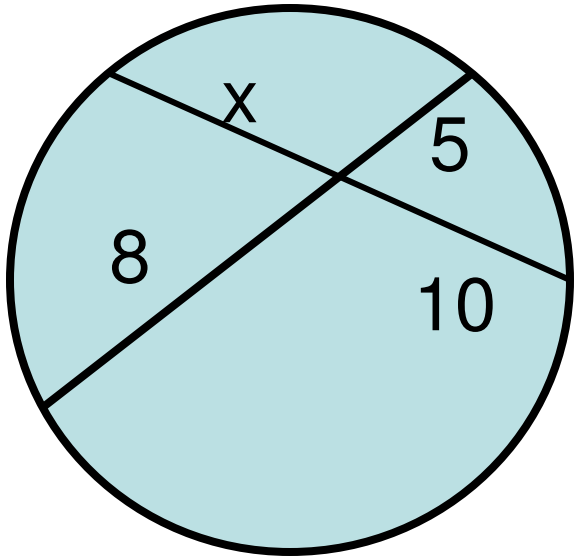
Theorem 9.13: _____

_____

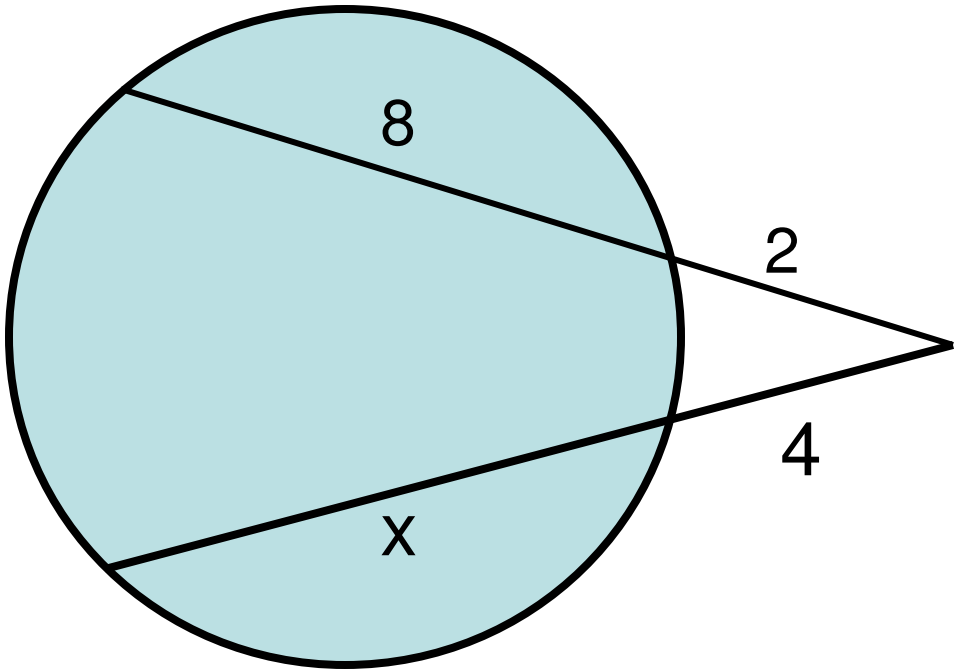
_____



Solve for x:



Find x:



Find x: