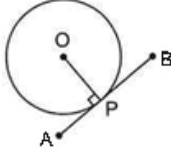
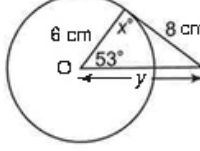
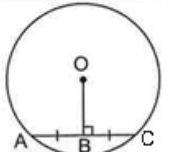
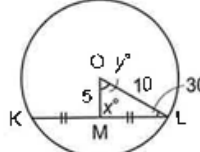
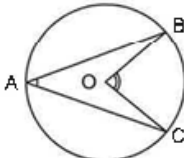
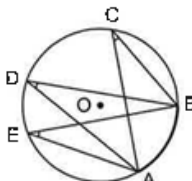
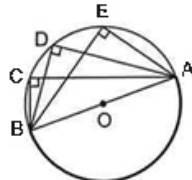
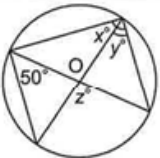
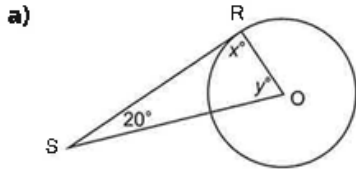


Unit 8 Study Guide

Skill	Description	Example
Recognize and apply tangent properties	 <p>$\angle APO = \angle BPO = 90^\circ$</p>	 <p>$x^\circ = 90^\circ$</p>
Recognize and apply chord properties in circles	 <p>If $OB \perp AC$, then $AB = CB$. If $AB = CB$, then $OB \perp AC$.</p>	 <p>$x^\circ = 90^\circ$ and $y^\circ = 60^\circ$ $ML^2 = 10^2 - 5^2$</p>
Recognize and apply angle properties in a circle	<ul style="list-style-type: none"> Inscribed and central angles  <p>$\angle BOC = 2\angle BAC$, or $\angle BAC = \frac{1}{2}\angle BOC$</p> <ul style="list-style-type: none"> Inscribed angles  <p>$\angle ACB = \angle ADB = \angle AEB$</p> <ul style="list-style-type: none"> Angles on a semicircle  <p>$\angle ACB = \angle ADB = \angle AEB = 90^\circ$</p>	 <p>$x^\circ = 90^\circ$ $y^\circ = 50^\circ$ $z^\circ = 100^\circ$</p>

Unit 8 Review

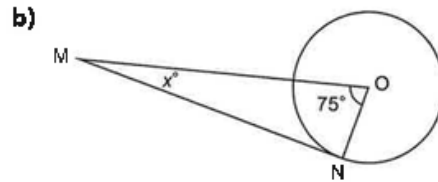
8.1 1. Find each value of x° and y° . Segments RS and MN are tangents.



$$x^\circ = \underline{\hspace{2cm}}$$

$$y^\circ = 180^\circ - \underline{\hspace{2cm}} - \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

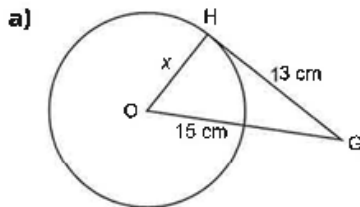


$$\angle ONM = \underline{\hspace{2cm}}$$

$$x^\circ = 180^\circ - \underline{\hspace{2cm}} - \underline{\hspace{2cm}}$$

$$= \underline{\hspace{2cm}}$$

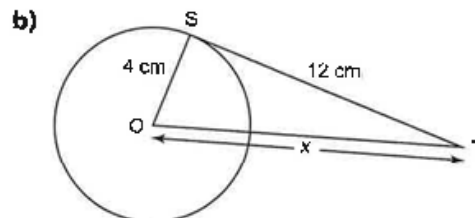
2. Find each value of x to the nearest tenth. Segments GH and ST are tangents.



$$\angle OHG = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} + x^2 + \underline{\hspace{2cm}}$$

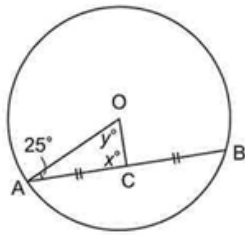
So, $x \approx \underline{\hspace{2cm}}$ cm



$$\angle OST = \underline{\hspace{2cm}}$$

So, $x \approx \underline{\hspace{2cm}}$ cm

B.2 3. Find the values of x° and y° .



$x^\circ = \underline{\hspace{2cm}}$

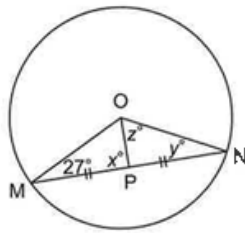
By the chord properties

$y^\circ = \underline{\hspace{1cm}} - \underline{\hspace{1cm}} - \underline{\hspace{1cm}}$

By the angle sum property

$y^\circ = \underline{\hspace{2cm}}$

4. Find the values of x° , y° , and z° .



$x^\circ = \underline{\hspace{2cm}}$

By the _____

OM = ON, so $\triangle \underline{\hspace{1cm}}$ is isosceles.

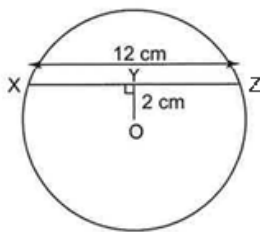
$\angle ONP = \angle OMP$

So, $y^\circ = \underline{\hspace{2cm}}$

$z^\circ = \underline{\hspace{1cm}} - \underline{\hspace{1cm}} - \underline{\hspace{1cm}}$ _____

$z^\circ = \underline{\hspace{2cm}}$

5. Find the length of the radius of the circle to the nearest tenth.



$XY = \frac{1}{2} \times \underline{\hspace{2cm}}$

$= \frac{1}{2} \times \underline{\hspace{2cm}} \text{ cm}$

$= \underline{\hspace{2cm}} \text{ cm}$

Draw radius OX.

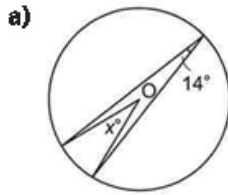
$OX^2 = \underline{\hspace{1cm}} + XY^2$

$OX^2 = \underline{\hspace{1cm}} + \underline{\hspace{1cm}}$

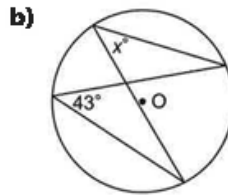
$OX \cong \underline{\hspace{2cm}}$

The radius is about _____ cm.

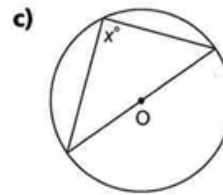
8.3 6. Find each value of x° .



$x^\circ = 2 \times \underline{\hspace{2cm}}$
 $x^\circ = \underline{\hspace{2cm}}$

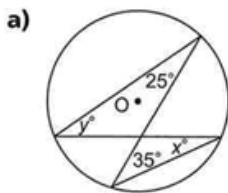


$x^\circ = \underline{\hspace{2cm}}$

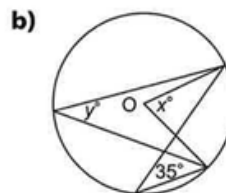


$x^\circ = \underline{\hspace{2cm}}$

7. Find each value of x° and y° .

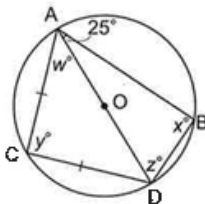


$x^\circ = \underline{\hspace{2cm}}$
 $y^\circ = \underline{\hspace{2cm}}$



$x^\circ = 2 \times \underline{\hspace{2cm}}$
 $= \underline{\hspace{2cm}}$
 $y^\circ = \underline{\hspace{2cm}}$

8. Find the value of w° , x° , y° , and z° .



$x^\circ = y^\circ = \underline{\hspace{2cm}}$

$z^\circ = \underline{\hspace{2cm}} - \underline{\hspace{2cm}} - \underline{\hspace{2cm}}$ By the angle sum property

$z^\circ = \underline{\hspace{2cm}}$

$\triangle ACD$ is isosceles. So, $\angle CDA = \angle CAD = w^\circ$

$w^\circ + w^\circ = \underline{\hspace{2cm}} - \underline{\hspace{2cm}}$ By the angle sum in $\triangle ACD$

$2w^\circ = \underline{\hspace{2cm}}$

$w^\circ = \frac{\underline{\hspace{2cm}}}{2}$

$w^\circ = \underline{\hspace{2cm}}$