

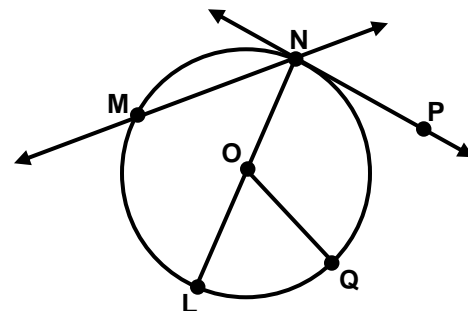
NAME _____ DATE _____ PER. _____

**REVIEW #15: Circles, Arcs, Arc Length, & Sector Area
REVIEW**

PART 1: CIRCLE BASICS

Use circle O below to name each of the following.

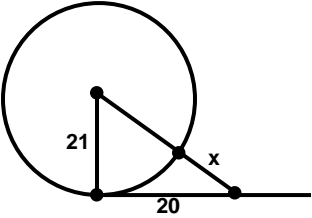
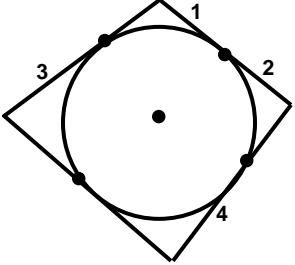
1. _____	The center.
2. _____	All radii.
3. _____	A diameter.
4. _____	A secant.
5. _____	A tangent.
6. _____	A point of tangency.
7. _____	A point in the interior.
8. _____	A point in the exterior.



PART 2: TANGENTS





Find the indicated values.

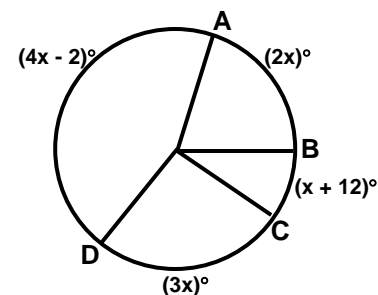
9. $x =$ _____	Find the value of 'x':
10. $x =$ _____	Find the value of 'x':
11. $x =$ _____	Find the value of 'x':

<p>12. $x =$ _____</p>	<p>Find the value of 'x':</p> 
<p>13. $P =$ _____</p>	<p>Find the perimeter of the quadrilateral:</p> 

PART 3: ARCS & CENTRAL ANGLES

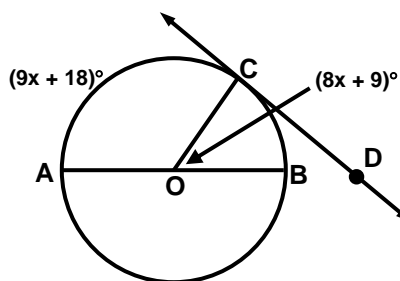
Using the figure below, find the measure of each of the following arcs and classify them.

<p>14. _____; _____</p>	
<p>15. _____; _____</p>	
<p>16. _____; _____</p>	
<p>17. _____; _____</p>	

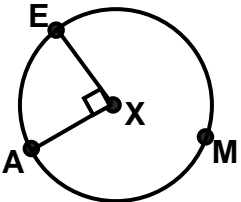


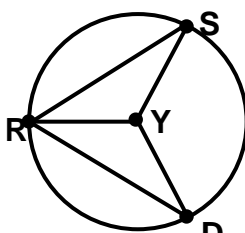
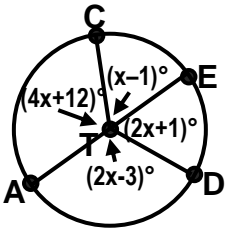
In the figure below, \overline{AB} is a diameter and \overleftrightarrow{CD} is a tangent to circle O. Find the measure of the following angles.

<p>18. _____</p>	<p>$m\angle AOC = ?$</p>
<p>19. _____</p>	<p>$m\angle BOC = ?$</p>
<p>20. _____</p>	<p>$m\angle OCD = ?$</p>

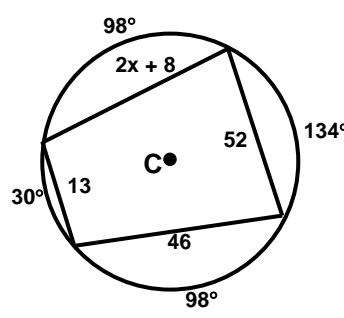
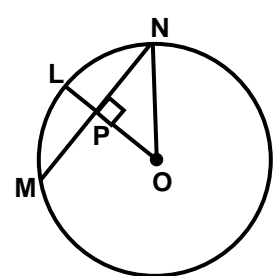
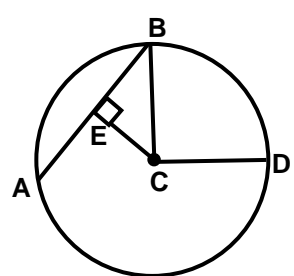


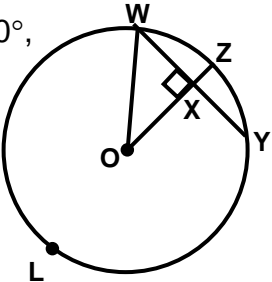
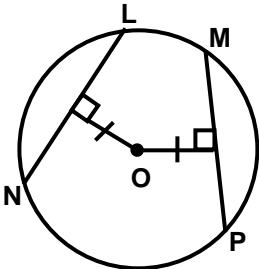
Find the indicated measure in each of the following.

<p>21. _____</p>	<p>In $\odot X$ the measure of $\widehat{EMA} =$ _____?</p>	
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<p>22. _____</p>	<p>In circle Y, \widehat{RS} and \widehat{RD} are congruent, adjacent arcs. If $m\widehat{RS} = 95^\circ$, find the measure of \widehat{SD}.</p> 
<p>23. _____</p>	<p>The measure of $\angle ETD = \underline{\hspace{2cm}}? \underline{\hspace{2cm}}$</p> 

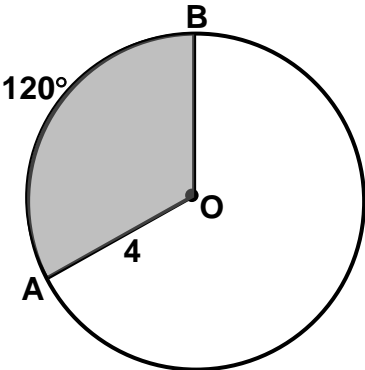
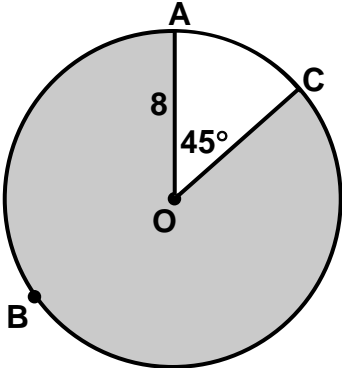
PART 4: ARCS & CHORDS
Find the indicated measures.

<p>24. $x =$ _____</p>	
<p>25. $PN =$ _____ $MP =$ _____ $LP =$ _____ $MN =$ _____</p>	<p>$PO = 12$ and $NO = 20$.</p> 
<p>26. $CB =$ _____ $EB =$ _____ $AE =$ _____ $AB =$ _____</p>	<p>Given that the chord AB is 7 cm from the center of circle C, which has a radius of 25 cm.</p> 

<p>27. $WX =$ _____</p> <p>$WY =$ _____</p> <p>$OX =$ _____</p> <p>$m\widehat{ZY} =$ _____</p>	<p>$XY = 10$ and $OW = 12.5$, $m\widehat{WLY} = 310^\circ$,</p> 
<p>28. $MP =$ _____</p>	<p>$NL = 9$</p> 

PART 5: ARC LENGTH & SECTOR AREA

Find the indicated arc length and area of the given sector. *Answers to even numbered problems should be rounded to the nearest tenth.*

<p>29. $\widehat{AB} =$ _____</p> <p>Sector Area = _____</p>	
<p>30. $\widehat{ABC} =$ _____</p> <p>Sector Area = _____</p>	
<p>31. Arc Length = _____</p>	<p>In a circle with a radius of 15 cm, the measure of an arc is 150°. Find the length of the arc.</p>
<p>32. Radius = _____</p>	<p>In a circle, the length of an arc with a measure of 120° is 14π. Find the radius of the circle.</p>