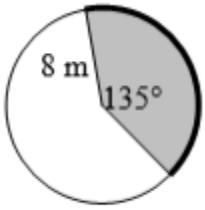
Geometry Unit 4A Angles of Circles Review Name: _____ Block: __

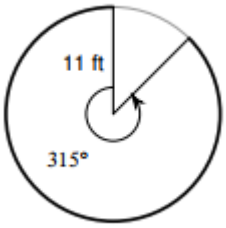
1. Find the area of the sector.



$A_S = \frac{\pi(8)^2(135)}{360}$

$= 24\pi \approx 75.4$

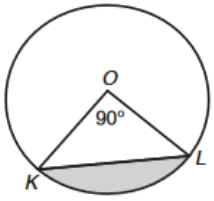
2. Find the arc length of the circle.



$A_L = \frac{2\pi(11)(315)}{360}$

$= \frac{77\pi}{4} \approx 60.5$

3. If the radius of the circle is 30 centimeters, what is the area of the shaded segment?



$A_S = \frac{\pi(30)^2(90)}{360}$

$= 225\pi \approx 706.9$

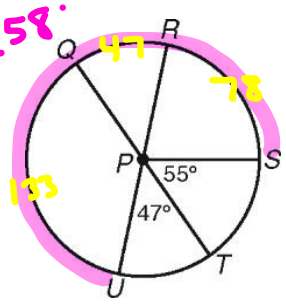
$A = \frac{1}{2}b \cdot h$

$= \frac{1}{2}(30)(30)$

$= 450$

$706.9 - 450 = 256.9$

4. Find $\widehat{UQS}$.



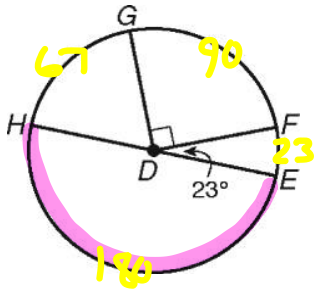
258°

47

78

193

5. Find $\widehat{HG}$ and $\widehat{HE}$.



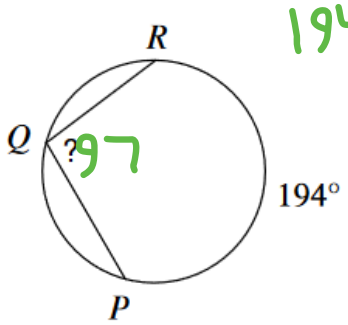
67

90

23

180

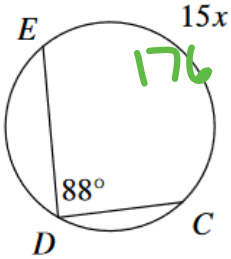
6. Find $\angle RQP$.



$194 \div 2$

97

7. Solve for x.



176

$15x + 11 = 176$

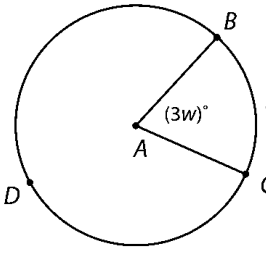
$-11 \quad -11$

$\frac{15x}{15} = \frac{165}{15}$

$x = 11$

$2(88) = 176$

8. Find the value of w.



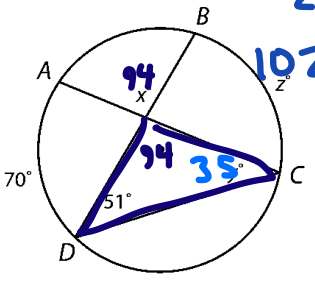
$3w = 4w - 5$

$-4w \quad -4w$

$-w = -5$

$w = 5$

9. Find the value of x, y, and z.



$2 \cdot 51$

180

−51

−35

94

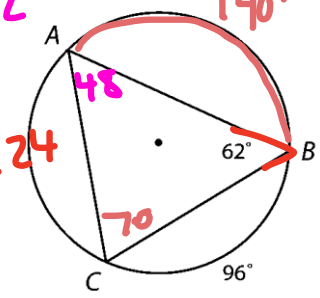
102

94

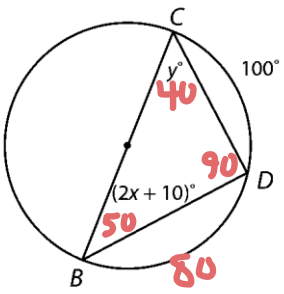
35

$70 \div 2$

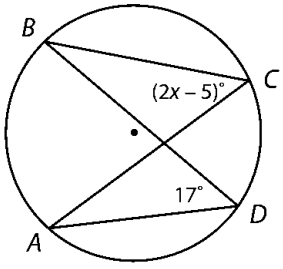
10. Find the $m\angle A, m\angle C, and\ \widehat{AB}$



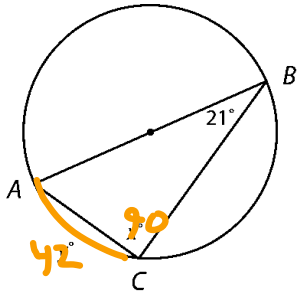
11. Find the $m\angle B, m\angle C, and\ \widehat{DB}$



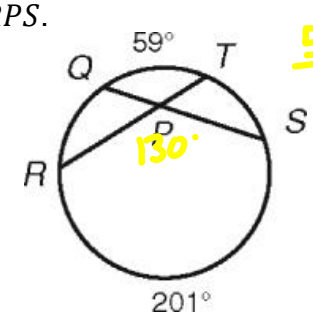
12. Find the value of x.



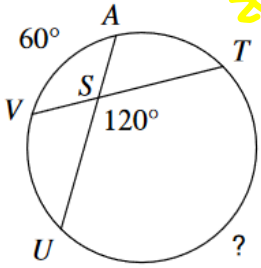
13. Find the value of x and y.



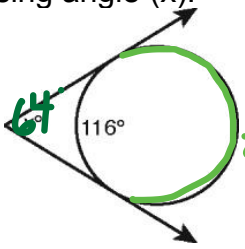
14. Find $m\angle RPS$.



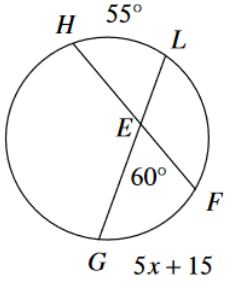
15. Find $\widehat{TU}$.



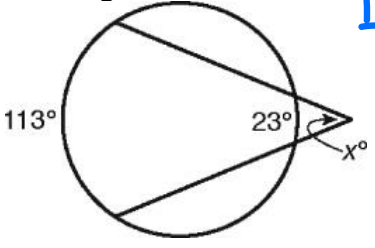
16. Find the missing angle (x).



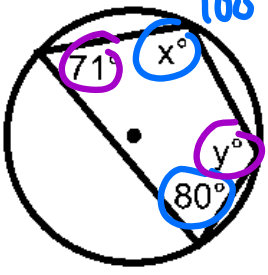
17. Solve for x.



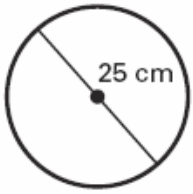
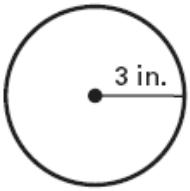
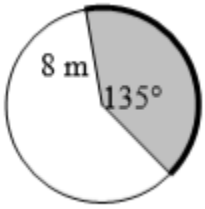
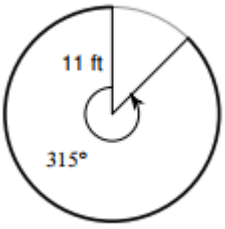
18. Find the missing arc.



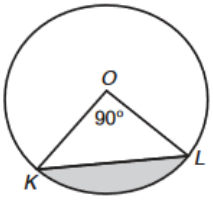
19. Find the value of x and y.



Geometry Unit 4A Angles of Circles Review Name: _____ Block: __

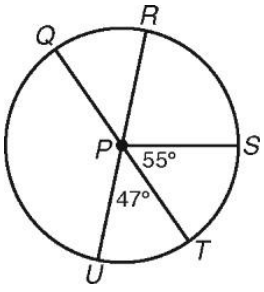
1. Find the circumference of the circle.  	2. Find the area circle. 
3. A large circular table has an area of 400 square feet. What is the table's circumference?	4. A cylindrical storage tank has a circumference of 200 meters. What is the area of the base of the tank?
5. Find the arc length of the circle.  	6. Find the area of the sector below. 
7. A circle has a radius of 7 units. Find the length of the arc created by a central angle measuring 260^o.	8. A circle has a radius of 76 units. Find the area of a sector with a central angle of 100°.
9. If the area of a circle is 115 in^2, what is the circumference?	10. Find the central angle of a sector created with a radius of 5 in and arc length of 25 in.

11. If the radius of the circle is 30 centimeters, what is the area of the shaded segment?

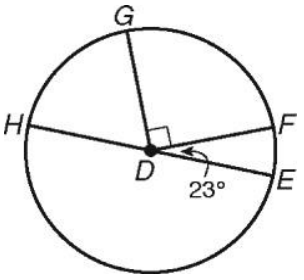


12. If a pizza has an area of 525 cm^2 and the pizza is cut into 8 equal slices, what is the area of one slice?

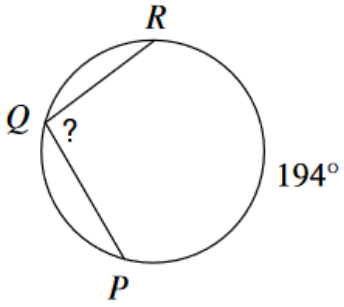
13. Find $\widehat{UQS}$.



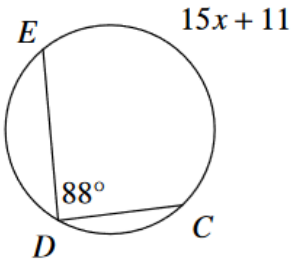
14. Find $\widehat{HG}$ and $\widehat{HE}$.



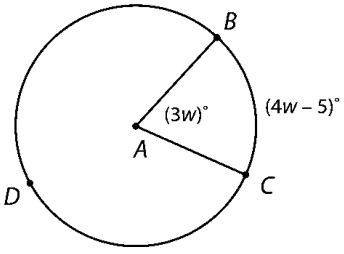
15. Find $\angle RQP$.



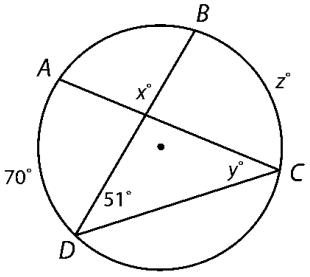
16. Solve for x.



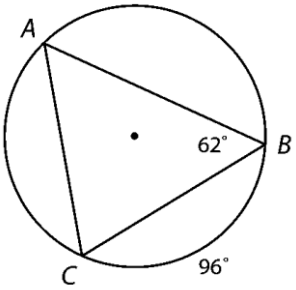
17. Find the value of w.



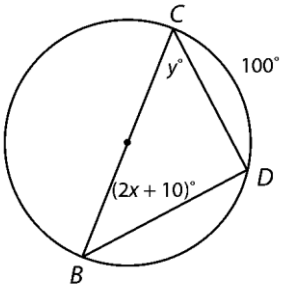
18. Find the value of x, y, and z.



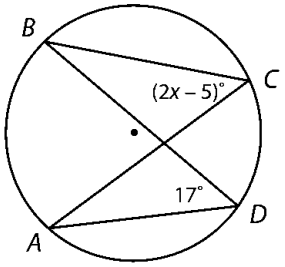
19. Find the $m\angle A, m\angle C, and\ \widehat{AB}$



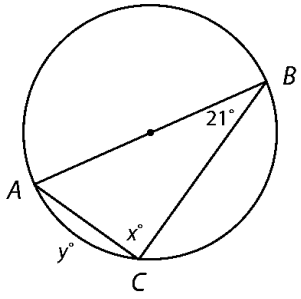
20. Find the $m\angle B, m\angle C, and\ \widehat{DB}$



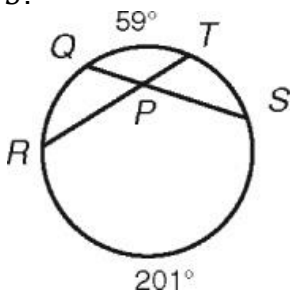
21. Find the value of x.



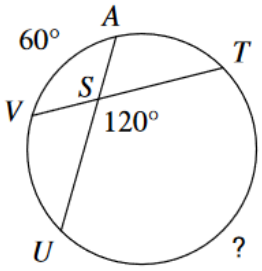
22. Find the value of x and y.



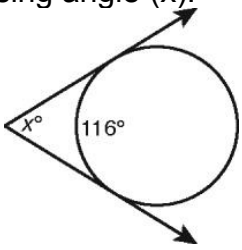
23. Find $m\angle RPS$.



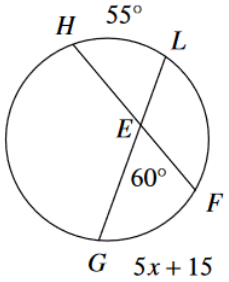
24. Find $\widehat{TU}$.



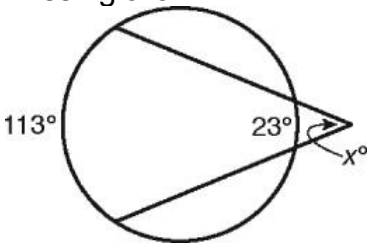
25. Find the missing angle (x).



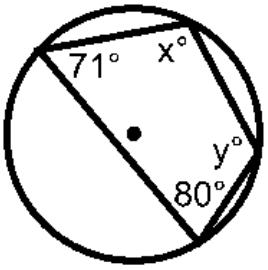
26. Solve for x.



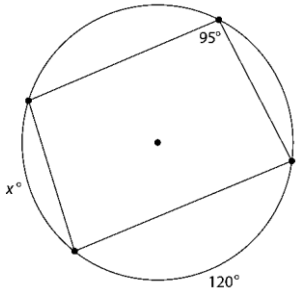
27. Find the missing arc.



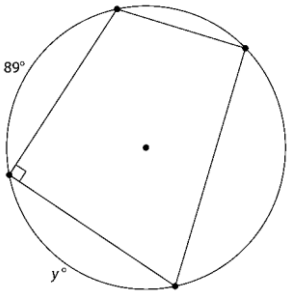
28. Find the value of x and y.

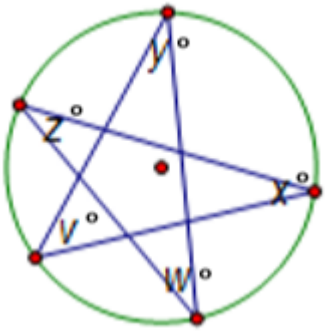
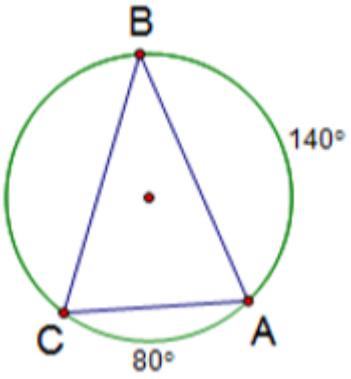


29. Find the value of x.



30. Find the value of y.



31. What is v° + w° + x° + y° + z°? Explain your reasoning.  	32. Find m∠BAC. What kind of triangle is ∆ABC? Explain your reasoning. 
33. Explain why the formula for the area of a sector is $A = \frac{\pi r^2 \theta}{360}$, where r is the radius of the cricle and θ is the measure in degrees of the central angle of the sector.	34. Explain why the formula for arc length is $A = \frac{2\pi r \theta}{360}$, where r is the radius of the cricle and θ is the measure in degrees of the central angle of the sector.