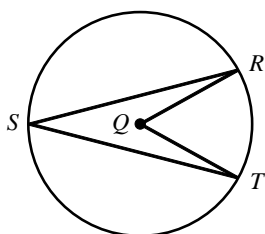


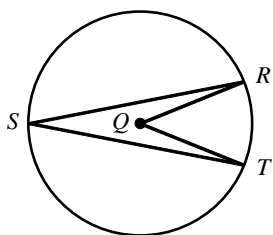
G.G.51: Investigate, justify, and apply theorems about the arcs determined by the rays of angles formed by two lines intersecting a circle when the vertex is: inside the circle (two chords); on the circle (tangent and chord); outside the circle (two tangents, two secants, or tangent and secant)

1. If $m\angle RST = 58$, what is $m\angle RQT$?



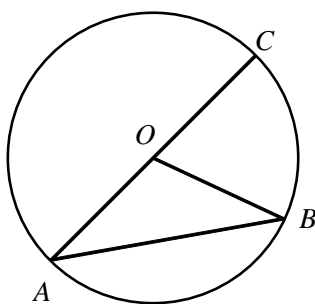
- [A] 116 [B] 58 [C] 29 [D] 174

2. If $m\angle RQT = 44$, what is $m\angle RST$?



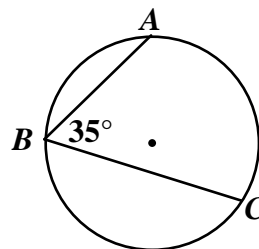
- [A] 44 [B] 88 [C] 132 [D] 22

3. Given: In circle O , $m\widehat{BAC} = 290$. Find $m\angle B$.



- [A] 20.5 [B] 41 [C] 35 [D] 17.5

4. Compare the quantity in Column A with the quantity in Column B.

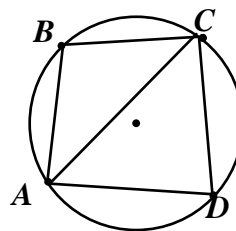


<u>Column A</u>	<u>Column B</u>
AB	BC

- [A] The quantity in Column A is greater.
 [B] The quantity in Column B is greater.
 [C] The two quantities are equal.
 [D] The relationship cannot be determined on the basis of the information supplied.

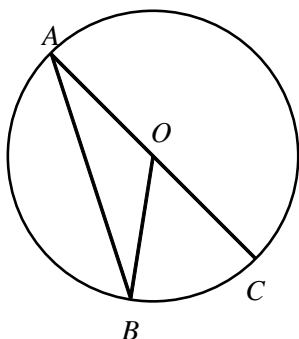
5. Compare the quantity in Column A with the quantity in Column B.

<u>Column A</u>	<u>Column B</u>
$m\angle ABC$	$m\angle ADC$

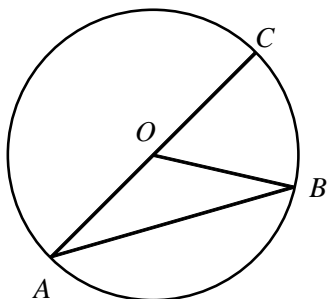


- [A] The quantity in Column A is greater.
 [B] The quantity in Column B is greater.
 [C] The two quantities are equal.
 [D] The relationship cannot be determined on the basis of the information supplied.

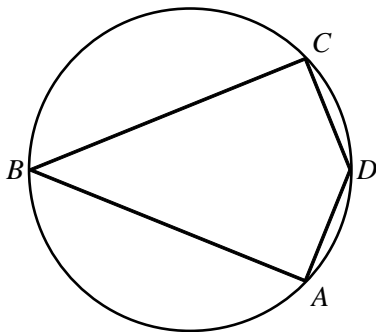
6. Given: \overline{AC} is a diameter of circle O and $m\angle BAC = 27$. Find $m\angle ABO$.



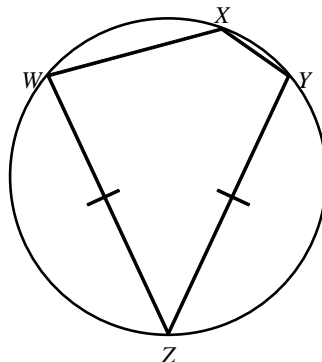
7. Given: In $\odot O$, $m\widehat{BAC} = 302$. Find $m\angle A$.



8. Given: $m\widehat{ABC} = 272$. Find $m\angle ABC$.



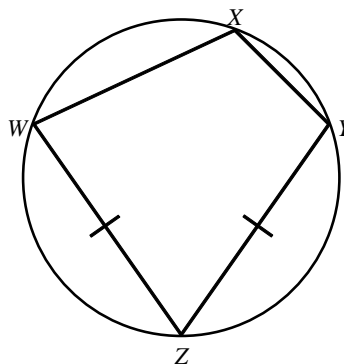
9. Given: $m\angle X = 130$; $\overline{WZ} \cong \overline{YZ}$; $m\angle Y = 100$



Refer to the diagram to find the measure of each of the following:

- a. $\angle Z$ b. \widehat{WZ} c. $\angle W$ d. \widehat{WX}

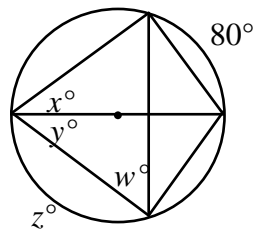
10. Given: $m\angle X = 110$; $\overline{WZ} \cong \overline{YZ}$; $m\angle Y = 100$



Refer to the diagram to find the measure of each of the following:

- a. $\angle Z$ b. \widehat{WZ} c. $\angle W$ d. \widehat{WX}

11. A child's toy is designed with a kite inscribed in a circle. Find each variable.



Geometry Practice: G.G.51 #4

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[1] A

[2] D

[3] C

[4] D

[5] A

[6] 27

[7] 29

[8] 44

a. $m\angle Z = 50$ b. $m\widehat{WZ} = 130$ c. $m\angle W$
[9] $= 80$ d. $m\widehat{WX} = 70$

a. $m\angle Z = 70$ b. $m\widehat{WZ} = 110$ c. $m\angle W$
[10] $= 80$ d. $m\widehat{WX} = 90$

[11] $x = y = 40$; $w = 50$; $z = 100$