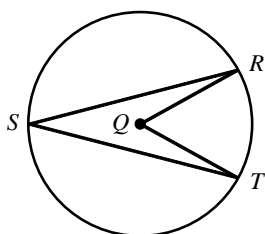


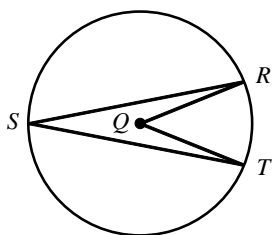
*G.G.53: Investigate, justify, and apply theorems regarding segments intersected by a circle: along two tangents from the same external point; along two secants from the same external point; along a tangent and a secant from the same external point; along two intersecting chords of a given circle*

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



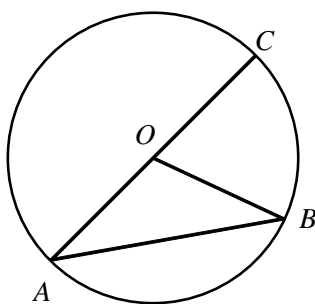
- [A] 116 [B] 58 [C] 29 [D] 174

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



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

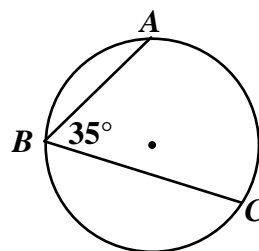
3. Given: In circle  $O$ ,  $m\widehat{BAC} = 290$ . Find  $m\angle B$ .



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

NAME: \_\_\_\_\_

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

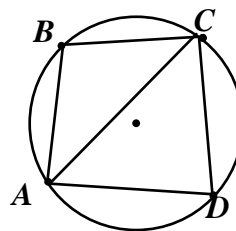


<u>Column A</u>	<u>Column B</u>
$AB$	$BC$

- [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.

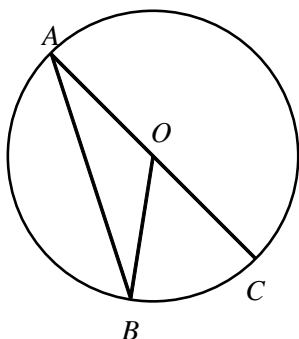
5. Compare the quantity in Column A with the quantity in Column B.

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

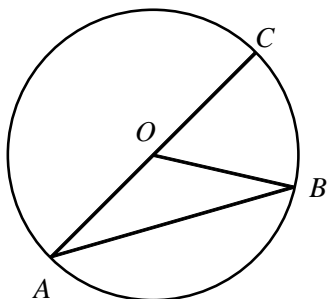


- [A] The quantity in Column A is greater.  
 [B] The quantity in Column B is greater.  
 [C] The two quantities are equal.  
 [D] The relationship cannot be determined on the basis of the information supplied.

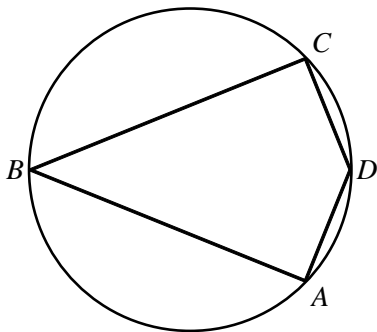
6. Given:  $\overline{AC}$  is a diameter of circle  $O$  and  $m\angle BAC = 27$ . Find  $m\angle ABO$ .



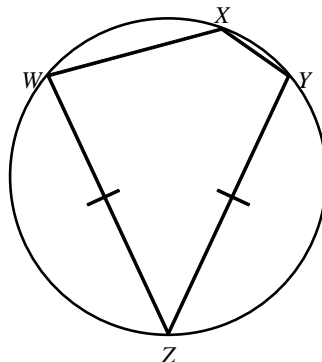
7. Given: In  $\odot O$ ,  $m\widehat{BAC} = 302$ . Find  $m\angle A$ .



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



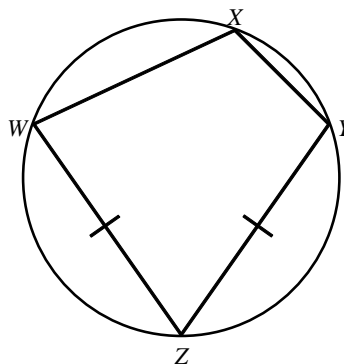
9. Given:  $m\angle X = 130$ ;  $\overline{WZ} \cong \overline{YZ}$ ;  $m\angle Y = 100$



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

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

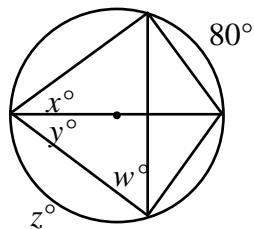
10. Given:  $m\angle X = 110$ ;  $\overline{WZ} \cong \overline{YZ}$ ;  $m\angle Y = 100$



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: Chords #1

www.jmap.org

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