

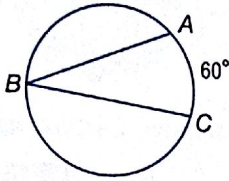
Check Your Understanding

Step-by-Step Solutions begin on page R20.

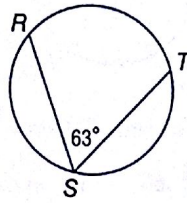


Example 1 Find each measure.

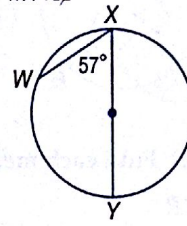
1. $m\angle B$



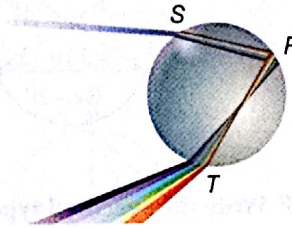
2. $m\widehat{RT}$



3. $m\widehat{WX}$

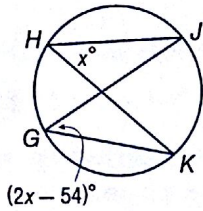


4. **SCIENCE** The diagram shows how light bends in a raindrop to make the colors of the rainbow. If $m\widehat{ST} = 144$, what is $m\angle R$?

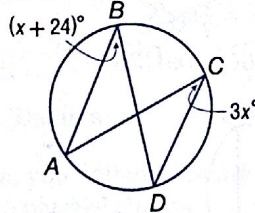


Example 2 **ALGEBRA** Find each measure.

5. $m\angle H$



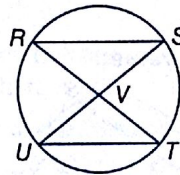
6. $m\angle B$



Example 3 **7. PROOF** Write a two-column proof.

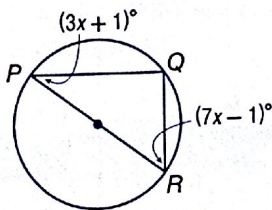
Given: \overline{RT} bisects \overline{SU} .

Prove: $\triangle RVS \cong \triangle UVT$

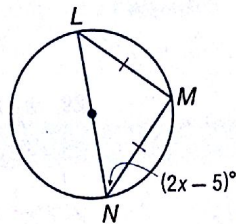


Examples 4-5 **ALGEBRA** Find each value.

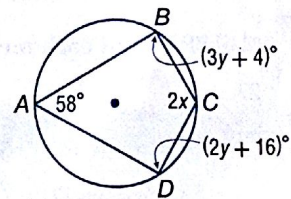
8. $m\angle R$



9. x



10. $m\angle C$ and $m\angle D$

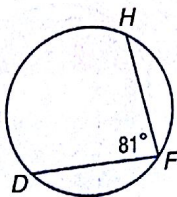


Practice and Problem Solving

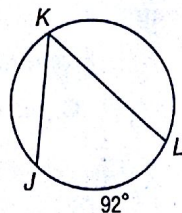
Extra Practice begins on page 969.

Example 1 Find each measure.

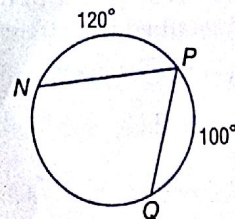
11. $m\widehat{DH}$



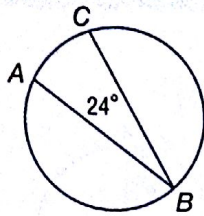
12. $m\angle K$



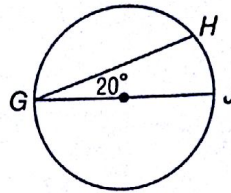
13. $m\angle P$



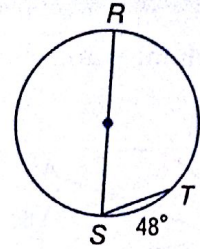
14. $m\widehat{AC}$



15. $m\widehat{GH}$



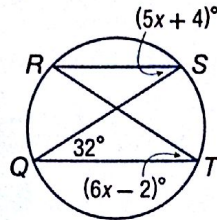
16. $m\angle S$



Example 2 ALGEBRA Find each measure.

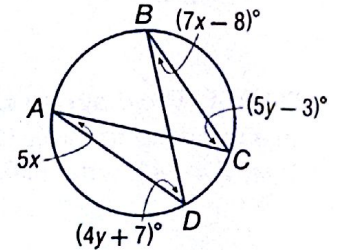
17. $m\angle R$

18. $m\angle S$



19. $m\angle A$

20. $m\angle C$

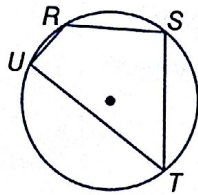


Example 3 PROOF Write the specified type of proof.

21. paragraph proof

Given: $m\angle T = \frac{1}{2}m\angle S$

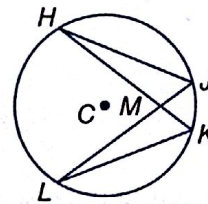
Prove: $m\widehat{TUR} = 2m\widehat{URS}$



22. two-column proof

Given: $\odot C$

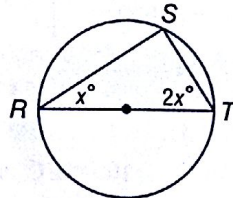
Prove: $\triangle KML \sim \triangle JMH$



Example 4 ALGEBRA Find each value.

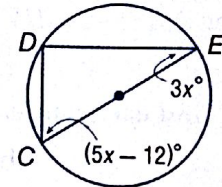
23. x

24. $m\angle T$



25. x

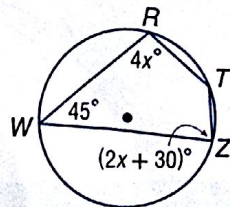
26. $m\angle C$



Example 5 ALGEBRA Find each measure.

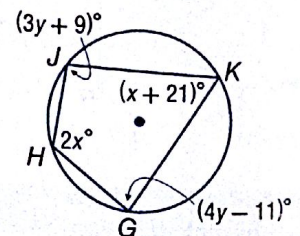
27. $m\angle T$

28. $m\angle Z$



29. $m\angle H$

30. $m\angle G$



31. **PROOF** Write a paragraph proof for Theorem 10.9.

SIGNS A stop sign in the shape of a regular octagon is inscribed in a circle. Find each measure.

32. $m\widehat{NPQ}$

34. $m\angle LRQ$

33. $m\angle RLQ$

35. $m\angle LSR$

