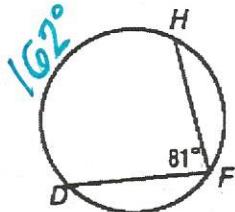


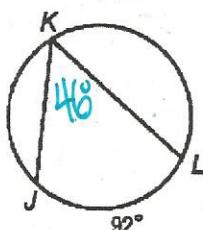
SHOW ALL WORK AND CIRCLE YOUR FINAL ANSWERS.

Find each measure.

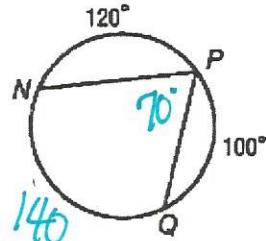
11. $m\widehat{DH} = 162^\circ$



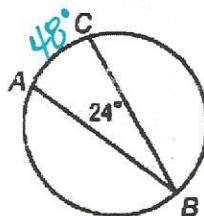
12. $m\angle K = 46^\circ$



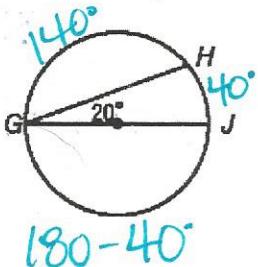
13. $m\angle P = 70^\circ$



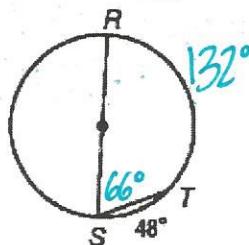
14. $m\widehat{AC} = 48^\circ$



15. $m\widehat{GH} = 140^\circ$



16. $m\angle S = 66^\circ$



ALGEBRA Find each measure.

17. $m\angle R = 34^\circ$

$(5x + 4)^\circ = 34^\circ$

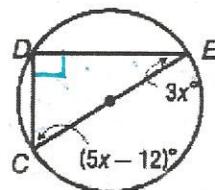
18. $m\angle S = 34^\circ$

$$\begin{aligned} 68^\circ &= 34^\circ \\ 68^\circ &= 32^\circ \\ (6x - 2)^\circ &= 34^\circ \end{aligned}$$

$$\begin{aligned} 5x + 4 &= 6x - 2 \\ 6 &= x \end{aligned}$$

25. $x = 12.75$

26. $m\angle C = 51.75^\circ$



$5x - 12 + 3x = 90$

$8x - 12 = 90$

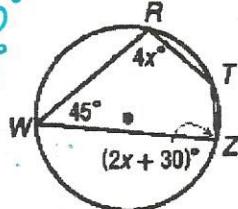
$8x = 102$
 $x = 12.75$

$m\angle C = 5(12.75) - 12 = 51.75^\circ$

ALGEBRA Find each measure.

27. $m\angle T = 135^\circ$

28. $m\angle Z = 80^\circ$



Opp. \nexists s of a quad. inscribed in a \odot are supp.

$$m\angle E = 180 - 45 = 135$$

$$4x + 2x + 30 = 180$$

$$6x = 150$$

$$x = 25$$

$$\begin{aligned} m\angle Z &= 2(25) + 30 \\ &= 80 \end{aligned}$$

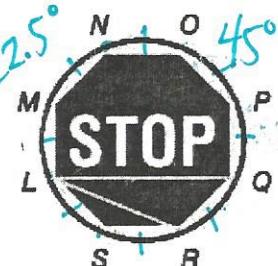
SIGNS A stop sign in the shape of a regular octagon is inscribed in a circle. Find each measure.

32. $m\widehat{NPQ} = 360 - 45 = 315^\circ$

34. $m\angle LRQ = \frac{1}{2}(5 \cdot 45) = 112.5^\circ$

35. $m\angle RLQ = \frac{1}{2}45 = 22.5^\circ$

$\frac{1}{2}(6 \cdot 45) = 135^\circ$



$$\frac{360}{8} = 45^\circ$$

36. **ART** Four different string art star patterns are shown. If all of the inscribed angles of each star shown are congruent, find the measure of each inscribed angle.



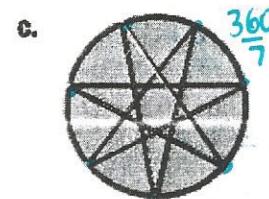
$$\frac{360}{5}$$

$$\frac{72}{2} = 36^\circ$$



$$\frac{360}{6}$$

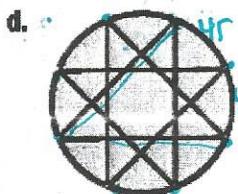
$$\begin{aligned} x &= \frac{1}{2}(120) \\ &= 60^\circ \end{aligned}$$



$$\frac{360}{7}$$

$$\frac{360}{7} \div 2$$

$$\frac{180}{7} \text{ or } 25.7$$



$$\frac{360}{8} = 45^\circ$$