

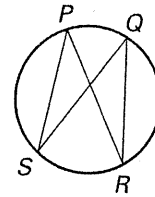
LESSON
10.4

Practice

For use with pages 671-679

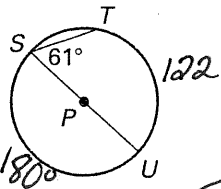
1. Multiple Choice In the figure shown, which statement is true?

- A. $\angle SPR \cong \angle PSQ$
- B. $\angle RQS \cong \angle RPS$
- C. $\angle RPS \cong \angle PRQ$
- D. $\angle PRQ \cong \angle SQR$



Find the measure of the indicated angle or arc in $\odot P$.

2. $m\widehat{ST}$

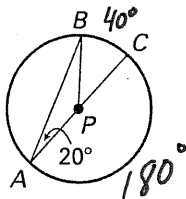


$$360 - 180 - 122 = m\widehat{ST}$$

$$180 - 122 = m\widehat{ST}$$

$$\boxed{58^\circ = m\widehat{ST}}$$

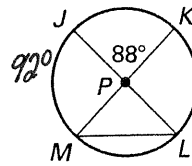
3. $m\widehat{AB}$



$$360 - 220 = m\widehat{AB}$$

$$\boxed{140^\circ = m\widehat{AB}}$$

4. $m\angle JLM$

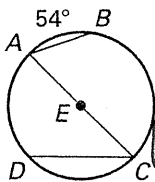


$$180 - 88 = 92^\circ$$

$$m\angle JLM = \frac{1}{2}(92)$$

$$\boxed{m\angle JLM = 46^\circ}$$

5. $m\angle A$



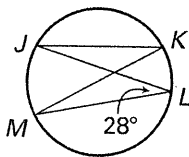
$$m\angle A = 180$$

$$- 54$$

$$m\angle A = \frac{126}{2}$$

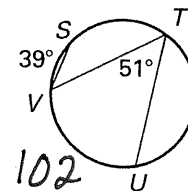
$$\boxed{m\angle A = 63^\circ}$$

6. $m\angle K$



$$\boxed{m\angle K = 28^\circ}$$

7. $m\widehat{VST}$



$$\begin{array}{r} 135 \\ 102 \\ + 39 \\ \hline 276 \end{array}$$

$$360 - 276 = 84^\circ = \widehat{ST}$$

$$m\widehat{VST} = 39 + 84$$

$$\boxed{m\widehat{VST} = 123^\circ}$$

Find the measure of the indicated angle or arc in $\odot P$, given $m\widehat{LM} = 84^\circ$ and $m\widehat{KN} = 116^\circ$.

8. $m\angle JKL = \frac{180^\circ}{2} = \boxed{90^\circ}$

9. $m\angle MKL = \frac{180^\circ - 84^\circ}{2} = \boxed{48^\circ}$

10. $m\angle KMN = \frac{116^\circ}{2} = \boxed{58^\circ}$

11. $m\angle JKM = 90 - 42 = \boxed{48^\circ}$

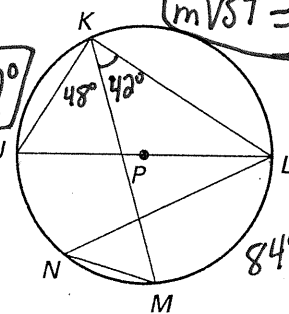
12. $m\angle KLN = \frac{116}{2} = \boxed{58^\circ}$

13. $m\angle LNM = \frac{84}{2} = \boxed{42^\circ}$

14. $m\widehat{MJ}$

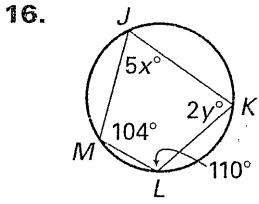
$$2(48) = \boxed{96^\circ}$$

15. $m\widehat{LKJ} = 180^\circ$



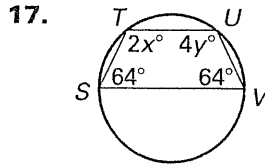
LESSON 10.4 Practice continued
For use with pages 671-679

Find the values of the variables.



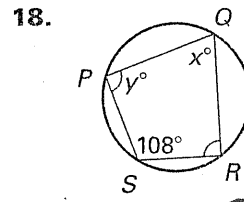
$$\begin{array}{r} 104 + 2y = 180 \\ -104 \\ \hline 2y = 76 \\ \\ \\ \hline y = 38 \end{array}$$

$$\begin{array}{r} 110 + 5x = 180 \\ -110 \\ \hline 5x = 70 \\ \\ \\ \hline x = 14 \end{array}$$



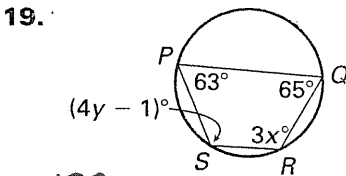
$$\begin{array}{r} 64 + 4y = 180 \\ -64 \\ \hline 4y = 116 \\ \\ \\ \hline y = 29 \end{array}$$

$$\begin{array}{r} 2x + 64 = 180 \\ -64 \\ \hline 2x = 116 \\ \\ \\ \hline x = 58 \end{array}$$



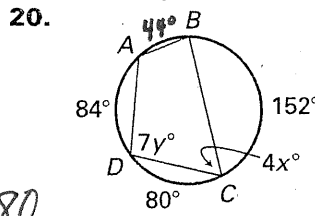
$$\begin{array}{r} y + y = 180 \\ \\ \\ \hline 2y = 180 \\ \\ \\ \hline y = 90 \end{array}$$

$$\begin{array}{r} 108 + x = 180 \\ -108 \\ \hline x = 72 \end{array}$$



$$\begin{array}{r} 63 + 3x = 180 \\ -63 \\ \hline 3x = 117 \\ \\ \\ \hline x = 39 \end{array}$$

$$\begin{array}{r} 4y - 1 + 65 = 180 \\ \\ \\ \hline 4y + 64 = 180 \\ -64 \\ \hline 4y = 116 \\ \\ \\ \hline y = 29 \end{array}$$



$$\begin{array}{r} 2 \\ 152 \\ + 84 \\ + 80 \\ \hline 316 \end{array}$$

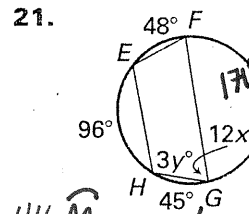
$$360 - 316 = 44 = \widehat{AB}$$

$$\frac{84 + 44}{2} = 4x$$

$$\frac{128}{2} = 4x$$

$$\frac{64}{4} = \frac{4x}{4}$$

$$\boxed{16 = x}$$



$$\begin{array}{r} 96 \\ + 48 \\ \hline 189 \end{array}$$

$$360 - 189 = 171 = \widehat{FG}$$

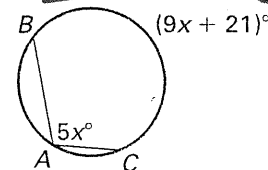
$$\frac{48 + 171}{2} = (3y) \cdot 2$$

$$\frac{219}{6} = \frac{6y}{6}$$

$$\boxed{36.5 = y}$$

22. Multiple Choice What is the value of x in the figure shown?

- A. 7 B. 12
C. 16 D. 21



$$\begin{array}{r} 2(5x) = 9x + 21 \\ 10x = 9x + 21 \\ -9x \\ \hline x = 21 \end{array}$$