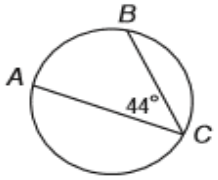
NAME _____ DATE _____ PERIOD _____

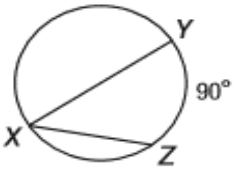
REVIEW Quiz 4 circles: 11-4 to 11-6

Find each measure.

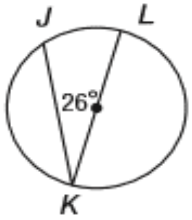
1. $m\widehat{AB}$



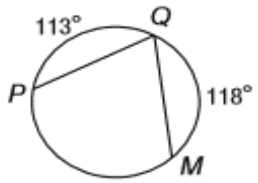
2. $m\angle X$



3. $m\widehat{JK}$

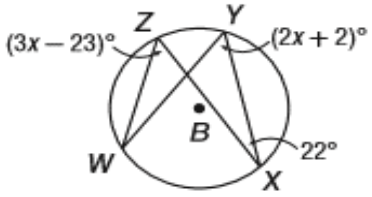


4. $m\angle Q$



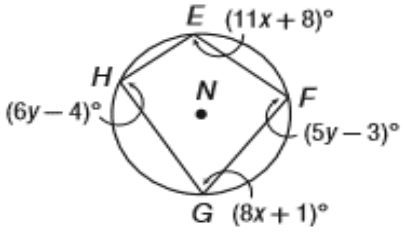
5. $m\angle W$

6. $m\angle Y$



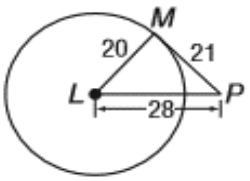
7. $m\angle G$

8. $m\angle H$

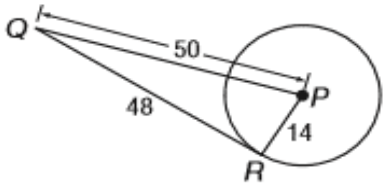


Determine whether each segment is tangent to the given circle. Justify your answer.

9. $\overline{MP}$

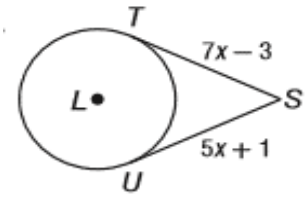


10. $\overline{QR}$

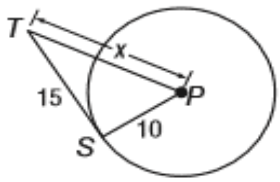


Find x. Assume that segments that appear to be tangent are tangent. Round to the nearest tenth, if necessary.

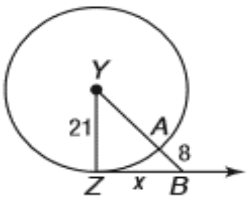
11.



12.

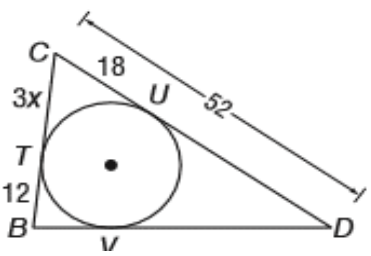


13.

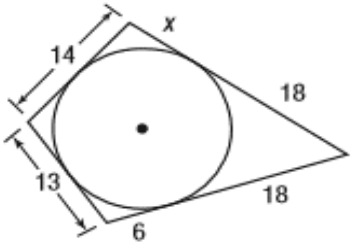


Find x, then find the perimeter.

14.

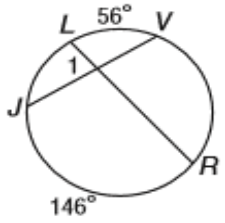


15.

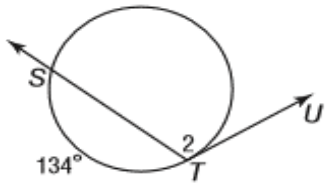


Find x. Assume that segments that appear to be tangent are tangent.

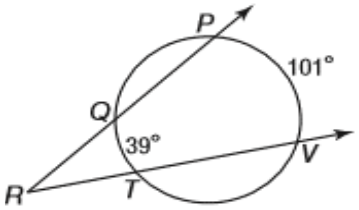
16. $m\angle 1$



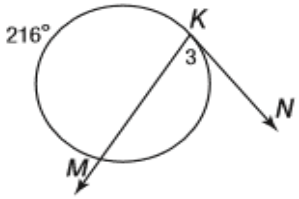
17. $m\angle 2$



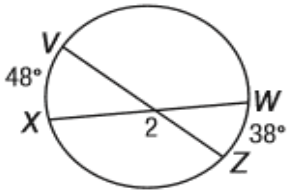
18. $m\angle R$



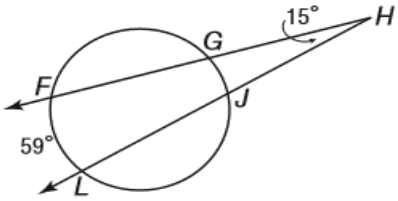
19. $m\angle 3$



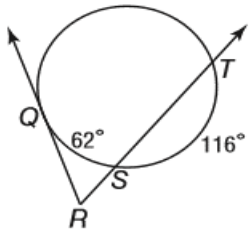
20. $m\angle 2$



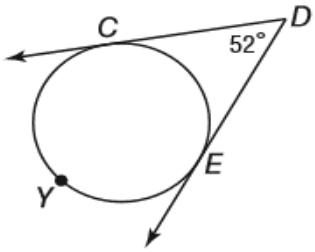
21. $m\widehat{GJ}$



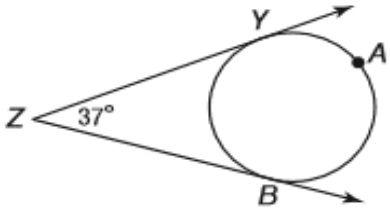
22. $m\angle R$



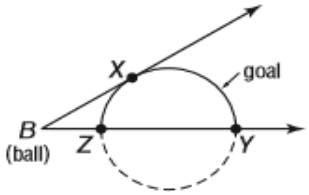
23. $m\widehat{CE}$



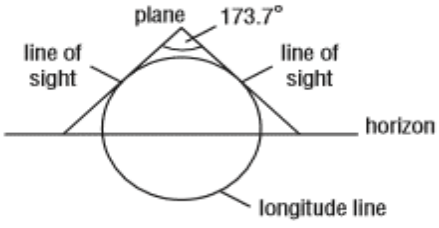
24. $m\widehat{YAB}$



25. **RECREATION** In a game of kickball, Rickie has to kick the ball through a semicircular goal to score. If $m\widehat{XZ} = 58$ and the $m\widehat{XY} = 122$, at what angle must Rickie kick the ball to score?



26. **FLYING** When flying at an altitude of 5 miles, the lines of sight to the horizon looking north and south make about a 173.7° angle. How much of the longitude line directly under the plane is visible from 5 miles high?



27. **CLOCKS** The design shown in the figure is that of a circular clock face inscribed in a triangular base. AF and FC are equal.

a. Find AB.

b. Find the perimeter of the clock.