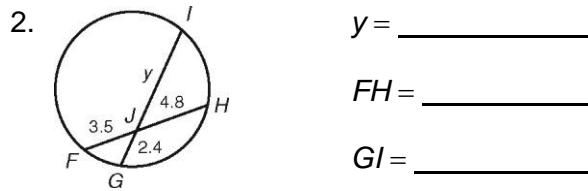
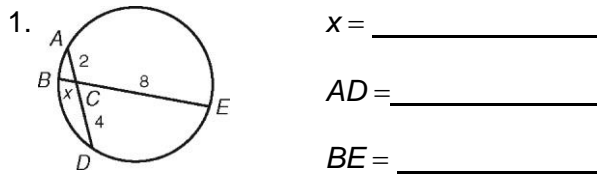


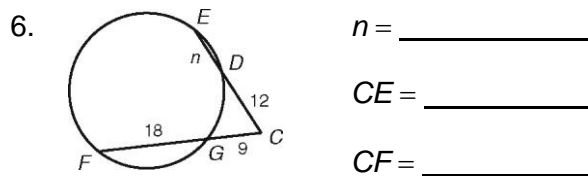
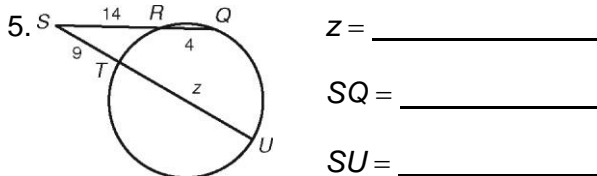
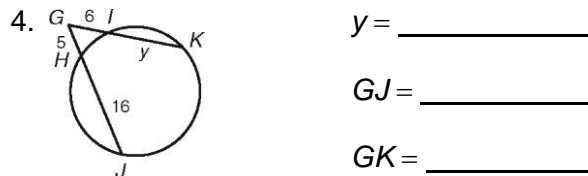
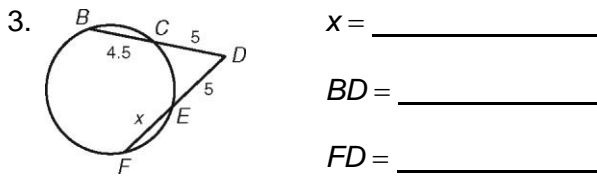
15.4 Show all Work.

Name \_\_\_\_\_

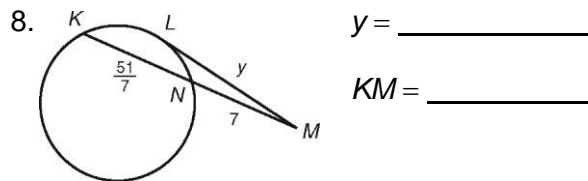
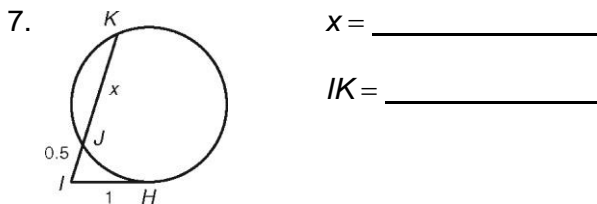
For each figure, determine the value of the variable and the indicated lengths by applying the **Chord-Chord Product Theorem**.



For each figure, determine the value of the variable and the indicated lengths by applying the **Secant-Secant Product Theorem**.

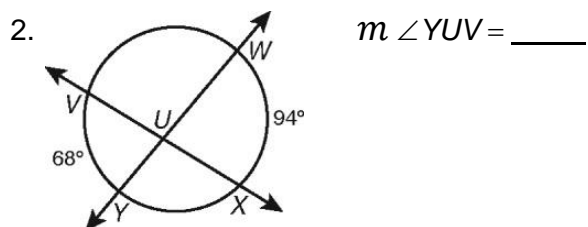
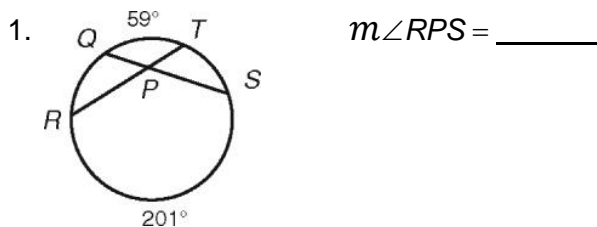


For each figure, determine the value of the variable and the indicated length by applying the **Secant-Tangent Product Theorem**.

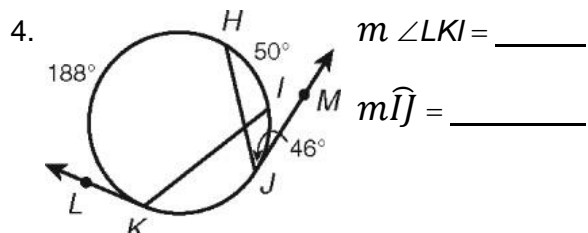
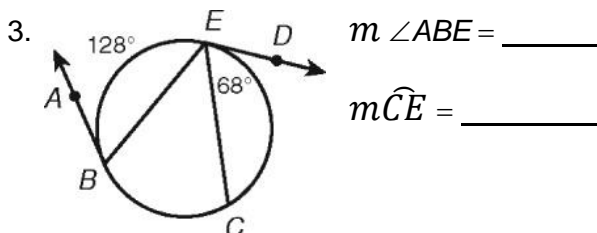


15.5

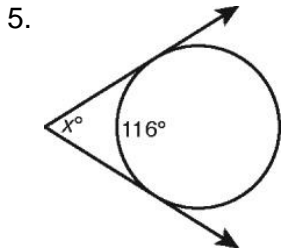
Use the **Intersecting Chords Angle Measure Theorem** to find the measure of each angle.



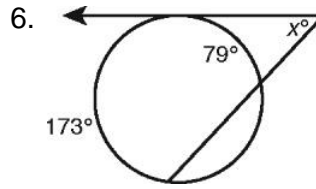
Use the **Tangent-Secant Interior Angle Measure Theorem** to find the measure of the arc or angle.



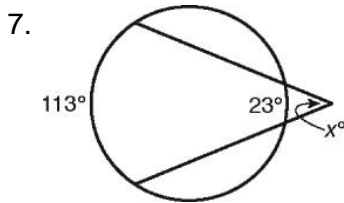
Use the Tangent-Secant Exterior Angle Measure Theorem to find the value of  $x$ .



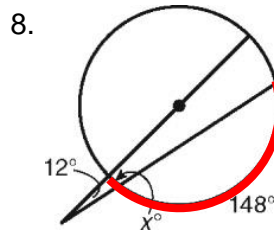
$x =$  \_\_\_\_\_



$x =$  \_\_\_\_\_



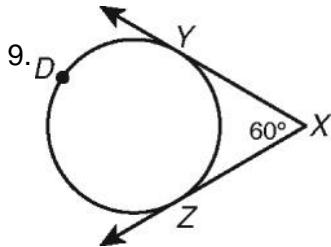
$x =$  \_\_\_\_\_



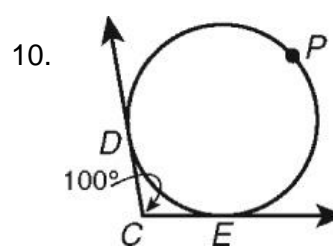
$x =$  \_\_\_\_\_

148° is the thick arc

For each figure, determine the measure of the intercepted minor arc.



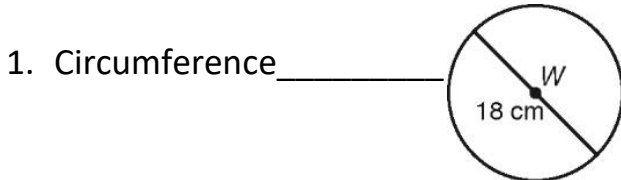
$m\widehat{YZ} =$  \_\_\_\_\_



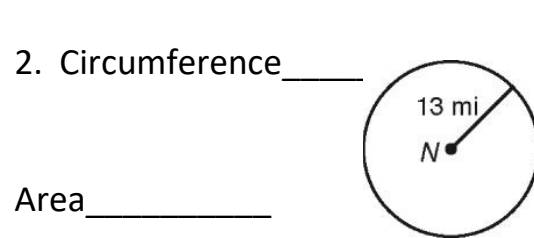
$m\widehat{DE} =$  \_\_\_\_\_

**16.1**

For 1-2, find the circumference and area of the circle. Leave your answers in terms of  $\pi$ .



Area \_\_\_\_\_



Area \_\_\_\_\_

3. Find the circumference of a circle with diameter 7 cm. \_\_\_\_\_

4. Find the area of a circle with diameter 7 cm. \_\_\_\_\_

5. The circumference of a tree is  $20\pi$  ft. Find the diameter. \_\_\_\_\_

6. Find the radius of a circle with a circumference of  $12\pi$  feet. \_\_\_\_\_

7. Find the diameter of a circle with area  $25\pi$  feet<sup>2</sup>. \_\_\_\_\_