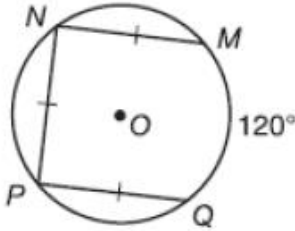
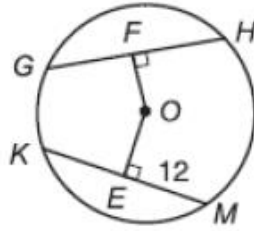


In each circle, O is the center. Find each measure.

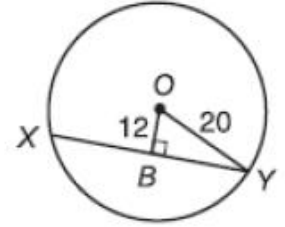
1. $m\widehat{NP}$



2. KM



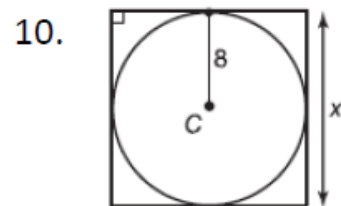
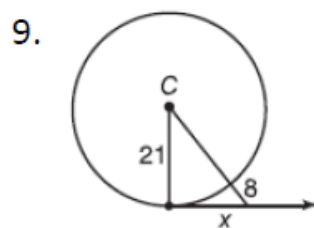
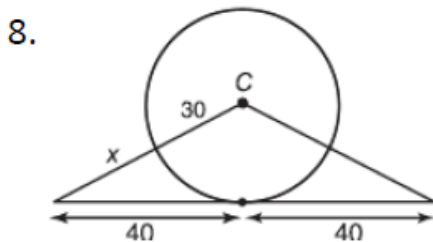
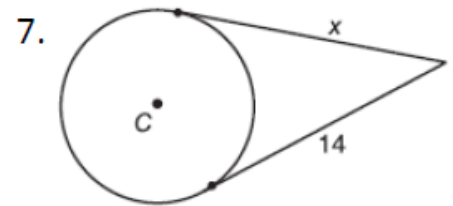
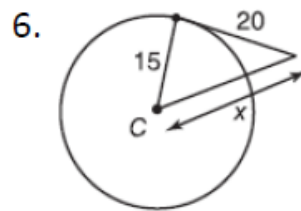
3. XY



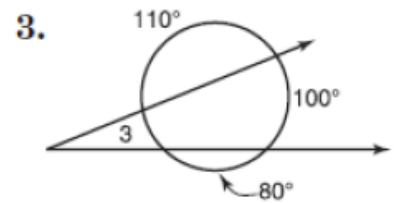
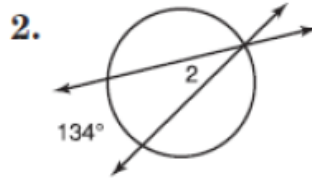
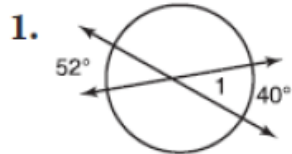
4. Suppose a chord is 20 inches long and is 24 inches from the center of the circle. Find the length of the radius.

5. Suppose a chord of a circle is 5 inches from the center and is 24 inches long. Find the length of the radius.

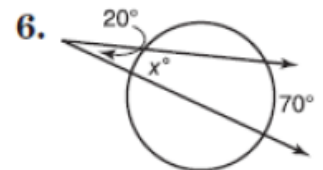
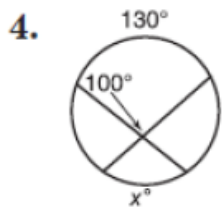
For each in circle C, find the value of x . Assume segments that appear to be tangent are tangent.



Find the measure of each numbered angle.

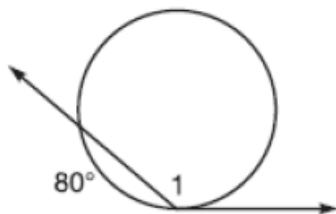


In each circle, find the value of x .

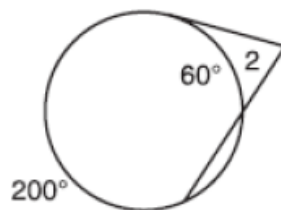


Find the measure of each angle. Assume segments that appear to be tangent are tangent.

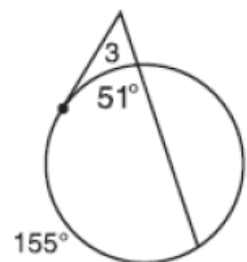
1. $m\angle 1$



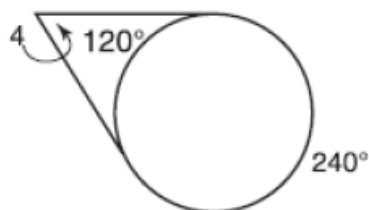
2. $m\angle 2$



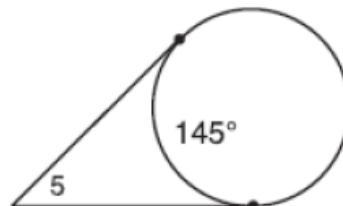
3. $m\angle 3$



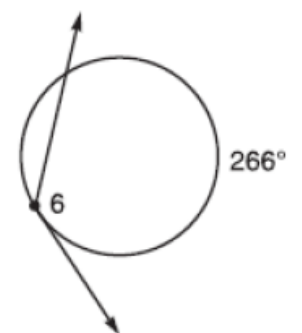
4. $m\angle 4$



5. $m\angle 5$



6. $m\angle 6$



Find the coordinates of the center of the circle and the measure of the radius given:

1) $(x + 1)^2 + y^2 = 121$

2) $(x - 4)^2 + (y - 1)^2 = .49$

Write an equation of a circle with the given center that passes thru the given point.

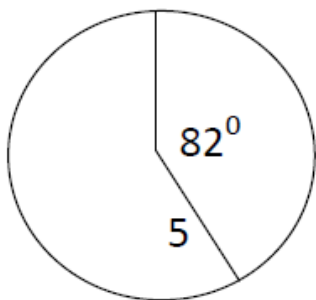
3) center: $(2, 3)$ point: $(0, 5)$

Given the two endpoints of a diameter, find the center and radius of a circle.

4) endpoint: $(3, 6)$ and endpoint: $(-1, -2)$

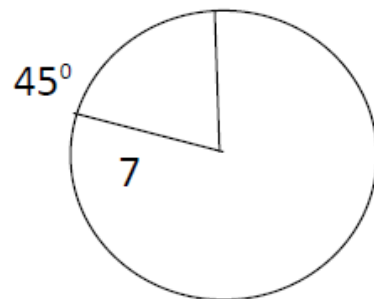
Find the length of the minor arc.

5)



Find the area of shaded portion.

6)

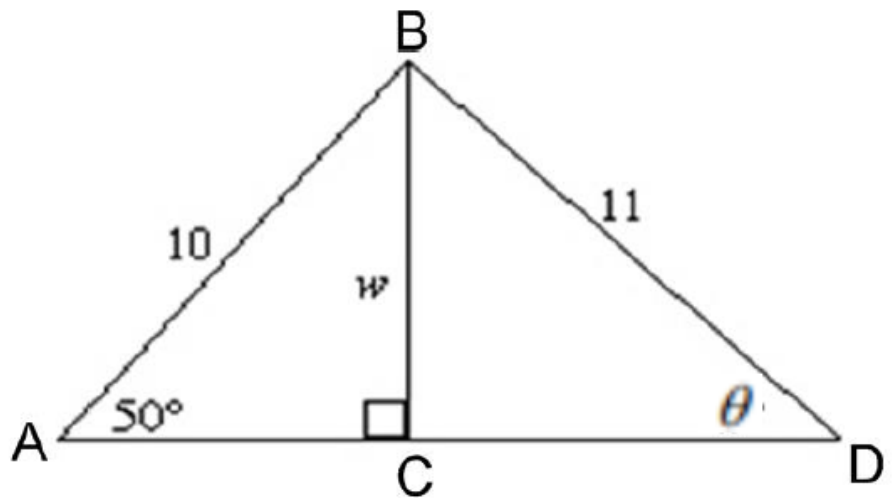


1)

AC: _____

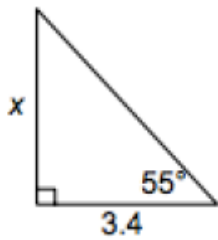
BC: _____

θ : _____

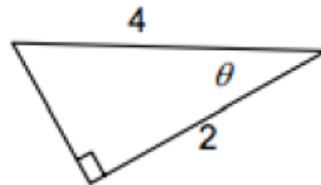


Find the missing information.

2. $x =$ _____



3. $\theta =$ _____



6. Give the picture, find the following sides:

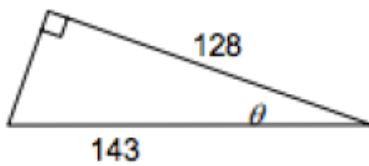
$\overline{AD} =$ _____

$\overline{BC} =$ _____

$\overline{CD} =$ _____

$\overline{AB} =$ _____

4. $\theta =$ _____



5. $x =$ _____

