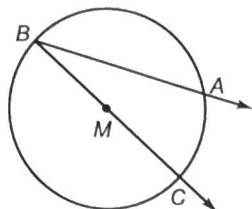


## Practice

### Inscribed Angles

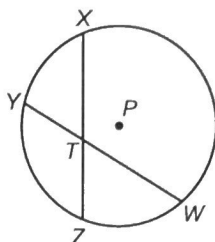
Determine whether each angle is an inscribed angle.  
Name the intercepted arc for the angle.

1.  $\angle ABC$



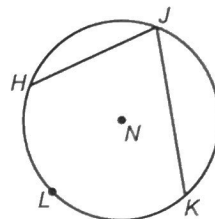
Inscribed  
 $\widehat{AC}$

2.  $\angle XTW$



Not  
Inscribed  $\widehat{XW}$

3.  $\angle HJK$



Inscribed.  $\widehat{HK}$

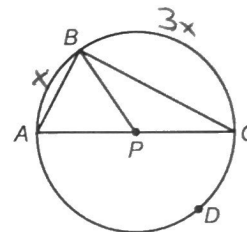
In  $\odot P$ ,  $m\widehat{AB} = x$  and  $m\widehat{BC} = 3x$ . Find each measure.

4.  $m\widehat{ADC}$

$180^\circ$

5.  $m\angle ABC$

$90^\circ$



6.  $m\widehat{AB} = 45^\circ$

~~$x$~~

7.  $m\angle A = 67.5^\circ$

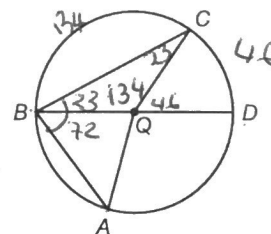
8.  $m\widehat{BC} = 135^\circ$

9.  $m\angle C = 22.5^\circ$

In  $\odot Q$ ,  $m\angle ABC = 72$  and  $m\widehat{CD} = 46$ . Find each measure.

10.  $m\widehat{CA} = 144^\circ$

11.  $m\widehat{BC} = 134^\circ$



12.  $m\widehat{AD} = 98^\circ$

13.  $m\angle C = 23$

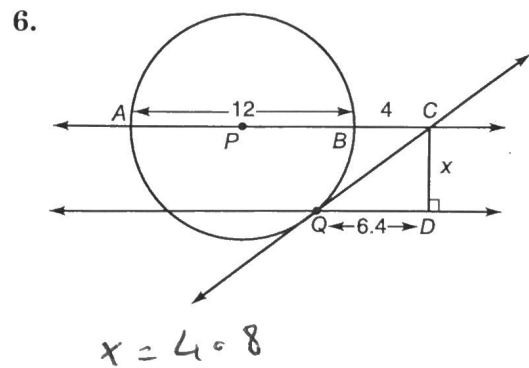
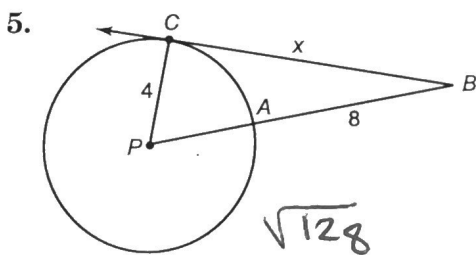
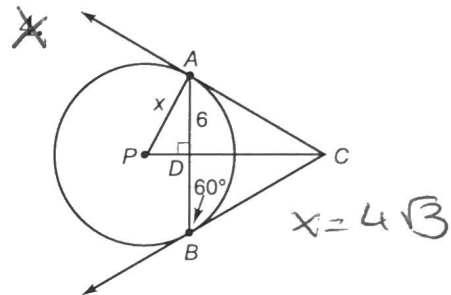
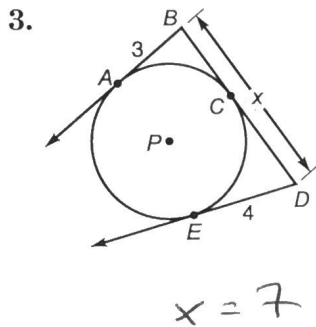
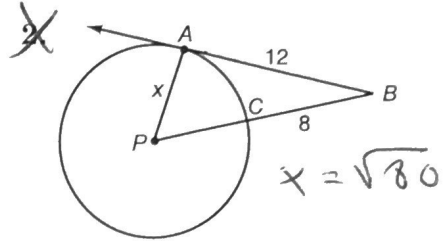
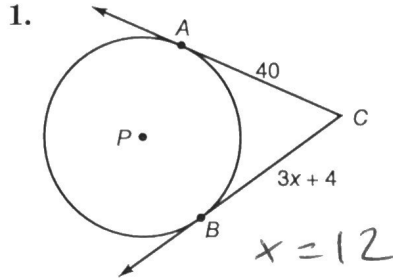
14.  $m\angle ABD = 49$

15.  $m\angle A = 49$

## Practice

### Tangents to a Circle

For each  $\odot Q$ , find the value of  $x$ . Assume segments that appear to be tangent are tangent.

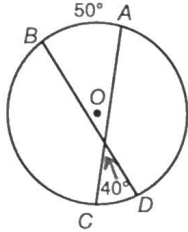


## Practice

### Secant Angles

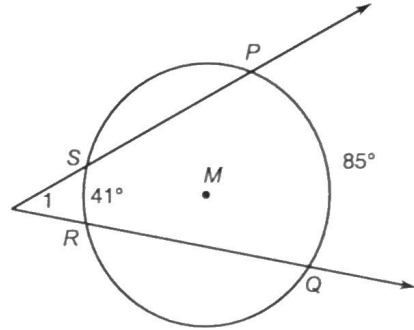
Find each measure.

1.  $m\widehat{CD}$



$m\widehat{CD} = 30$

2.  $m\angle 1$

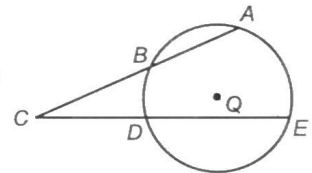


$m\angle 1 = 22$

In  $\odot Q$ ,  $m\widehat{AE} = 140$ ,  $m\widehat{BD} = y$ ,  $m\widehat{AB} = 2y$ , and  $m\widehat{DE} = 2y$ .  
Find each measure.

3.  $m\widehat{BD} = 44^\circ$

4.  $m\widehat{AB} = 88^\circ$



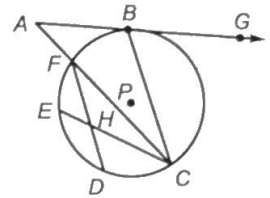
5.  $m\widehat{DE} = 88^\circ$

6.  $m\angle BCD = 48^\circ$

## Practice

### Secant-Tangent Angles

In  $\odot P$ ,  $m\widehat{BC} = 4x - 50$ ,  $m\widehat{DE} = x + 25$ ,  $m\widehat{EF} = x - 15$ ,  $m\widehat{CD} = x$ , and  $m\widehat{FB} = 50$ . Find the measure of each angle. Assume lines that appear to be tangent are tangent.



1.  $m\angle A = 50^\circ$

2.  $m\angle BCA = 25^\circ$

3.  $m\angle ABC = 105^\circ$

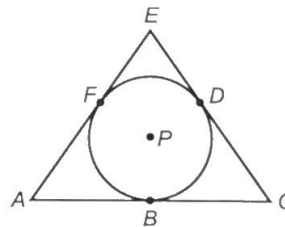
4.  $m\angle GBC = 75^\circ$

5.  $m\angle FHE = 42.5^\circ$

6.  $m\angle CFD = 25^\circ$

In  $\odot P$ ,  $m\angle A = 62$  and  $m\widehat{BD} = 120$ . Find the measure of each angle.

7.  $m\angle C = 60^\circ$

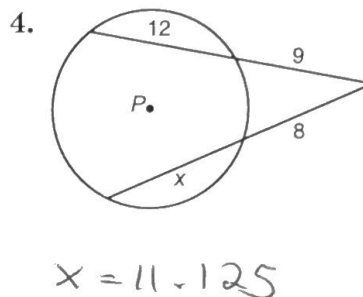
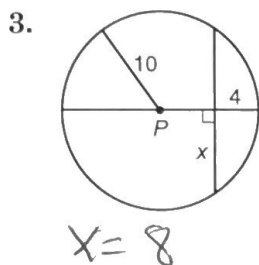
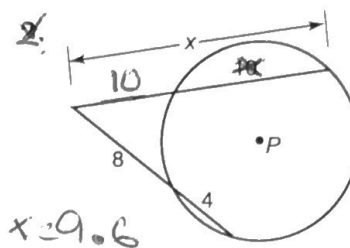
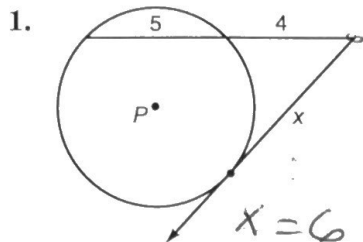


8.  $m\angle E = 58^\circ$

## Practice

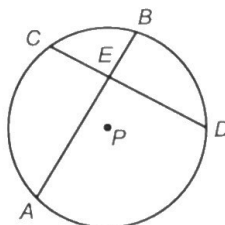
### Segment Measures

In each circle, find the value of  $x$ . If necessary, round to the nearest tenth. Assume segments that appear to be tangent are tangent.



In  $\odot P$ ,  $CE = 6$ ,  $CD = 16$ , and  $AE = 17$ . Find each measure.

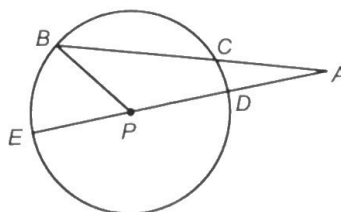
5.  $EB = 5.65$



6.  $AB = 22.65$

In  $\odot P$ ,  $AC = 3$ ,  $BC = 5$ , and  $AD = 2$ . Find each measure.

7.  $PD = 5$



8.  $ED = 10$

9.  $PB = 5$

## Practice

### Equations of Circles

Find the coordinates of the center and the measure of the radius for each circle whose equation is given.

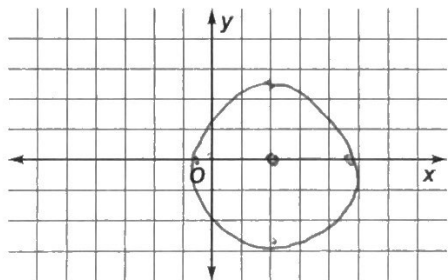
1.  $(x - 3)^2 + (y + 1)^2 = 16$   
 $C(3, -1)$

2.  $(x + \frac{5}{8})^2 + (y + 2)^2 = \frac{25}{9}$   
 $(-\frac{5}{8}, -2)$

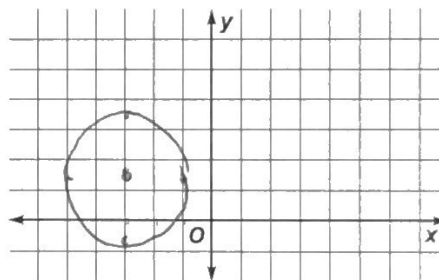
3.  $(x - 3.2)^2 + (y - 0.75)^2 = 40$   
 $(3.2, 0.75)$

Graph each equation on a coordinate grid.

4.  $(x - 2)^2 + y^2 = 6.25$



5.  $(x + 3)^2 + (y - \frac{3}{2})^2 = 4$



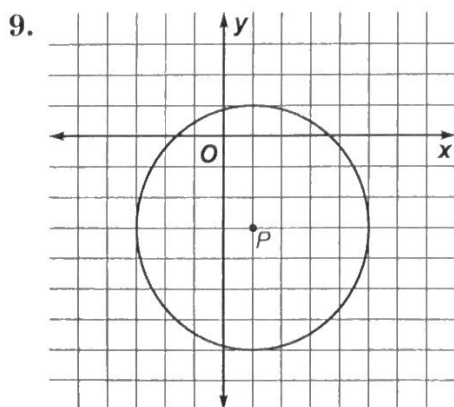
Write the equation of circle *P* based on the given information.

7. center:  $P(0, \frac{1}{2})$   
 radius: 8

$$x^2 + (y - \frac{1}{2})^2 = 64$$

8. center:  $P(-5.3, 1)$   
 diameter: 9

$$(x + 5.3)^2 + (y - 1)^2 = 20.25$$



$$(x - (-1))^2 + (y - (-3))^2 = 16$$

10. a diameter whose endpoints are at  
 $(5, -7)$  and  $(-2, 4)$

$$M(1.5, -1.5)$$

$$(x - 1.5)^2 + (y + 1.5)^2 = 42.5$$

$$r = \frac{\sqrt{7^2 + 11^2}}{2}$$