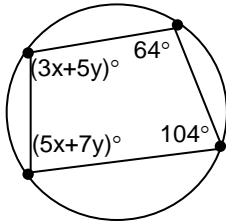
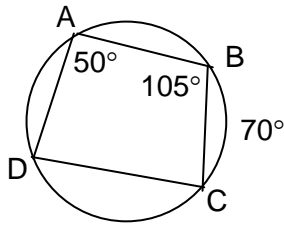


Figures are not drawn to scale. Exact answers or round to 3 decimal places unless specified otherwise.

1. Find x and y .



2. Find the $m\widehat{AB}$

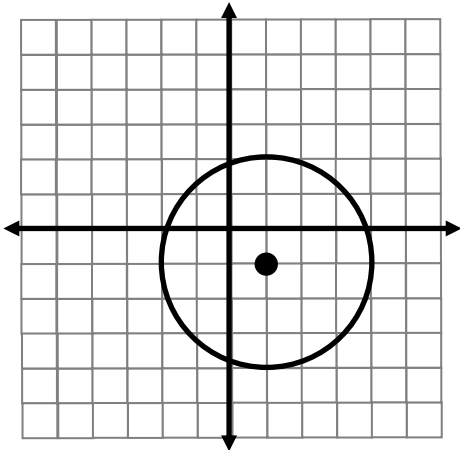


3. If the area of the segment is $25\pi - 50$ square inches, what is the length of the radius of circle O ?

4. If the area of the segment is $\pi - 2$ square inches, what is the length of the radius of circle O ?

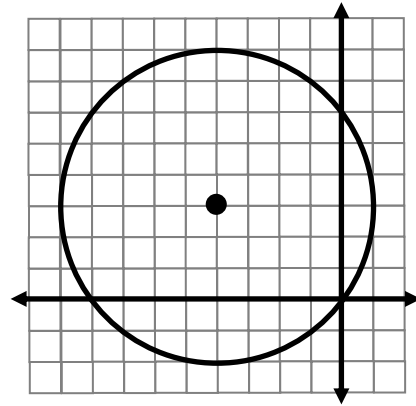
Write the equation of the following circles:

5.



Equation: _____

6.



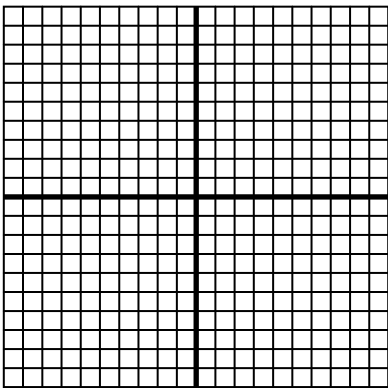
Equation: _____

For 7 and 8, Graph the following equations and find the radius and center.

7. $(x + 4)^2 + (y - 1)^2 = 9$

Radius: _____

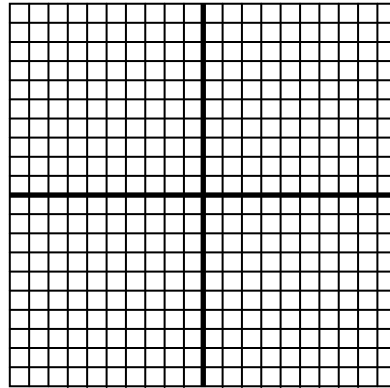
Center: _____



8. $(x - 2)^2 + (y - 5)^2 = 25$

Radius: _____

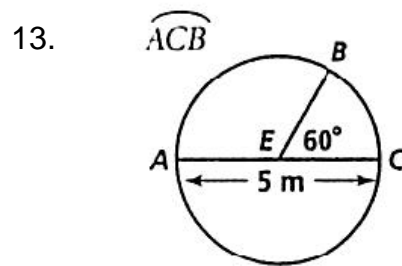
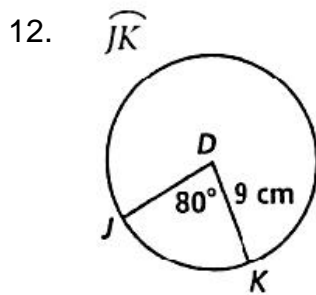
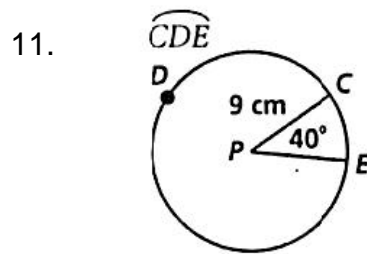
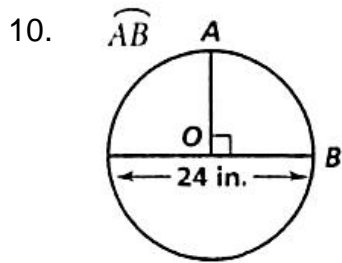
Center: _____



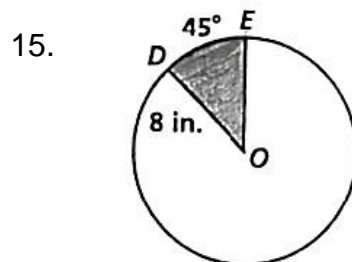
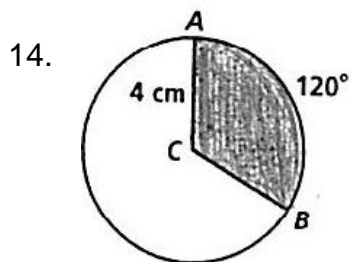
For 9, complete the square and find the center and radius of each circle.

9. $x^2 + y^2 - 4x + 10y + 20 = 0$

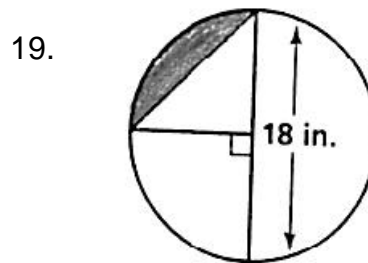
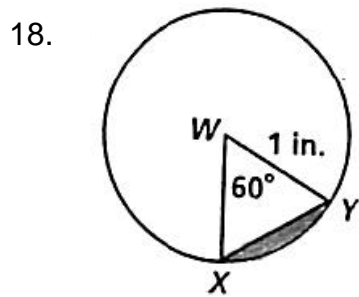
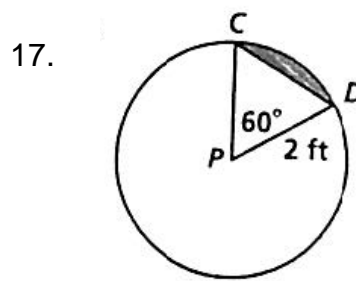
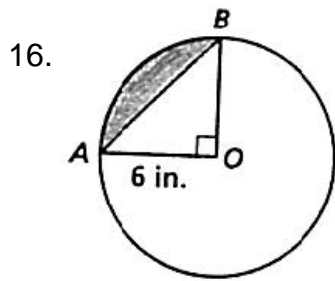
Find the length of each arc. Leave your answers in terms of π .



Find the area of the shaded sector. Leave your answers in terms of π .



Find the area of the shaded segment of each circle. Leave your answers in terms of π .



Convert the radians to a degree measure and the degrees to a radian measure.

20. $2\pi / 3 =$

21. $395^\circ =$