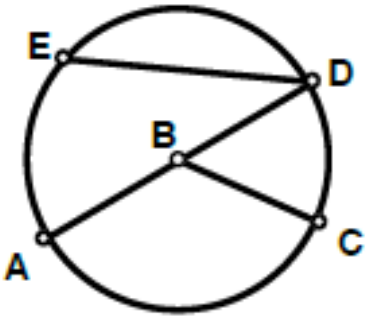
**Geometry** **Name_____ has known their best friend since:**
**Circles Test Review** **Date _____ Block_____**

| **Word Bank:** | | | | | |
|---|---|---|---|---|---|
| Central angle | Tangent | Semi –circle | Major arc | Minor arc | Secant |
| Point of tangency | Radius | Chord | Diameter | Inscribed angle | Degrees |




1. In the diagram, point B is the center of the circle.

a. $\overline{ED}$ is called a _____.

b. $\overline{BC}$ is called a _____.

c. $\overline{DA}$ is called a _____.

d. $\angle EDA$ is called an _____.

e. A line that intersects a circle in two points is called a _____.

f. A line that intersects a circle in exactly one point is called a _____. The point of intersection is called the _____.

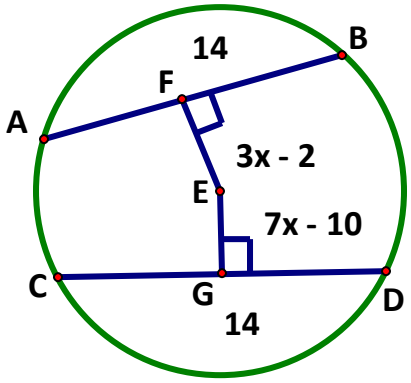
g. Arcs of circles are measured in _____.

h. An arc that is less than 180 degrees is called a _____.

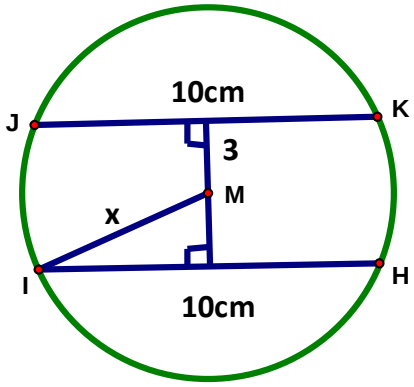
i. An arc that contains 180 degrees is called a _____.

j. An arc that is more than 180 degrees is called a _____.

2. AB = CD = 14. Find the value of x and then FE.

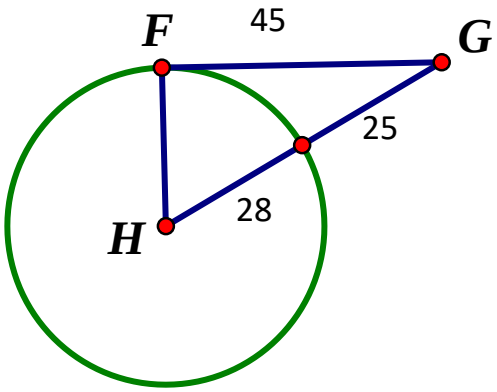



3. Solve for the value of x.

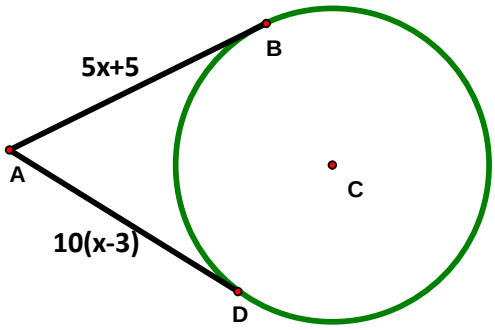



x = _____ FE = _____ x = _____

4. Is FG tangent to $\odot H$ ? Show your work.

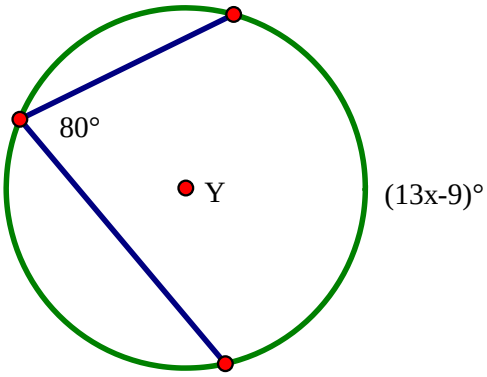



5. $\overline{AB}$ *and* $\overline{AD}$ *are* tan*gent to* $\odot C$.
Solve for x.



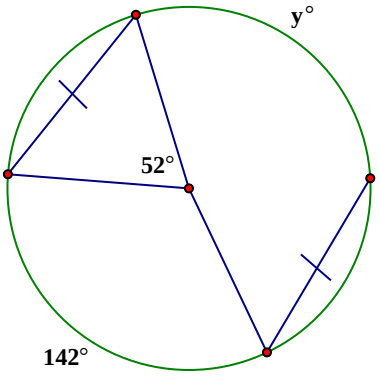

x = _____

6. Find the value of x in circle Y.



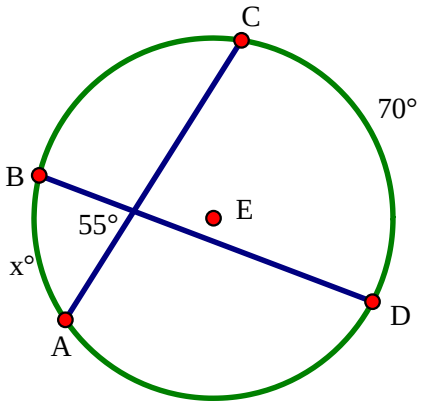

x = _____

7. Find the value of y.



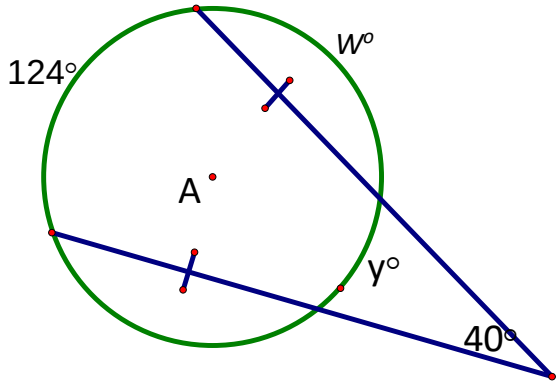

y = _____

8. Find the value of x.




x = _____

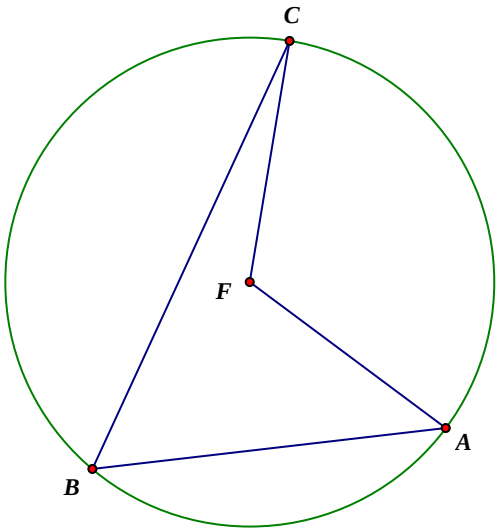
9. Solve for y and w.



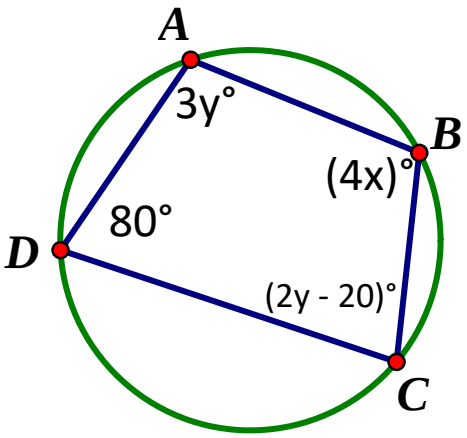

y = _____ w = _____

10. In the figure to the right, find: $m\angle CBA$ and $m\angle CFA$

$\overset{\frown}{m}ABC = 240°$




11. The quadrilateral ABCD is inscribed in the circle. Solve for the value of x and y, then find $m(\angle C)$.

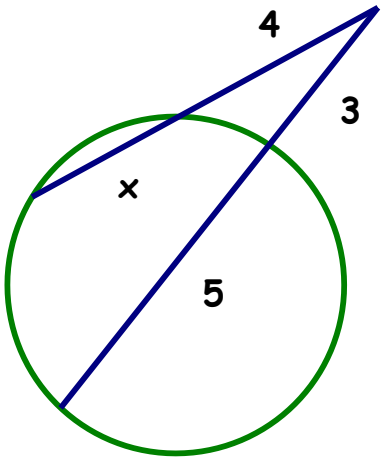



x = _____

y = _____

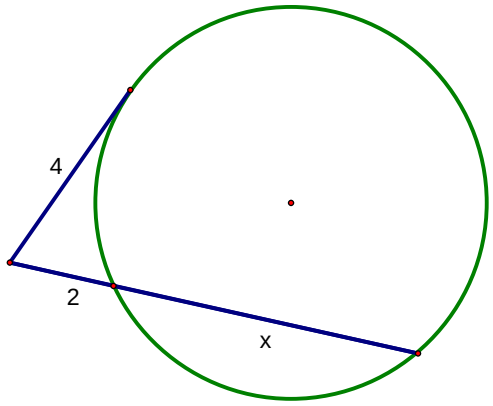
$m(\angle C) =$ _____

12. Find the value of x.



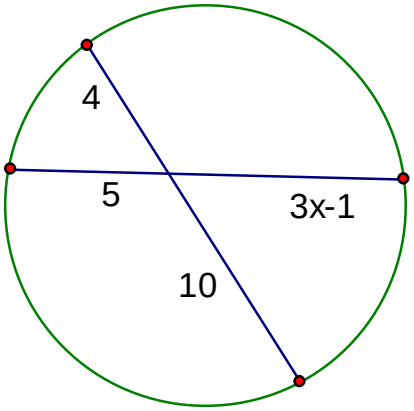

x = _____

13. Find the value of x.



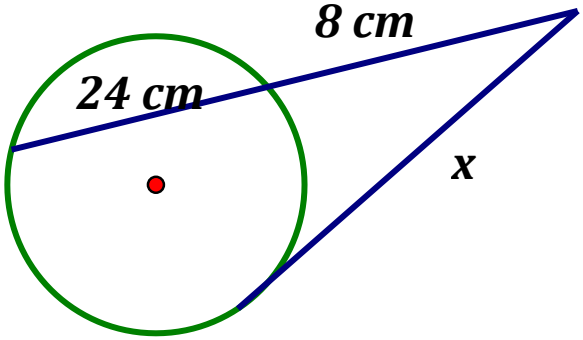

x = _____

14. Find the value of x.



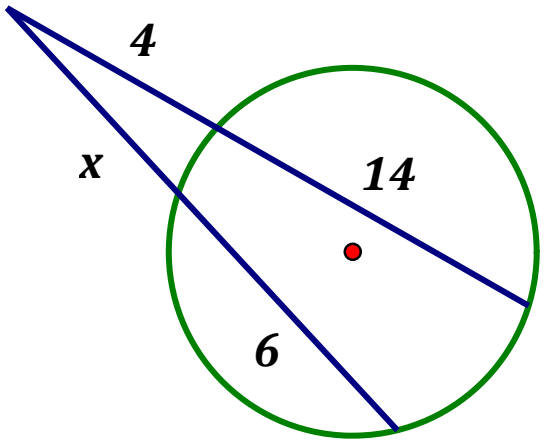

x = _____

15.



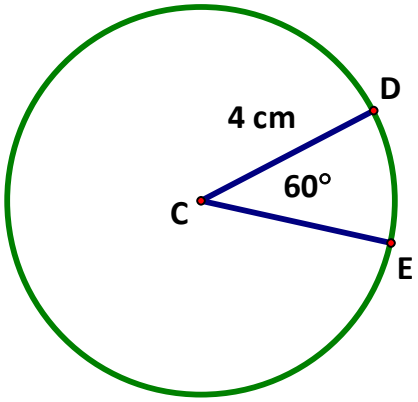

x = _____

16.



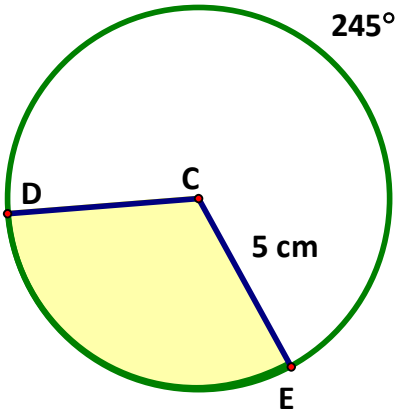

x = _____

17. Find the length of arc DE.



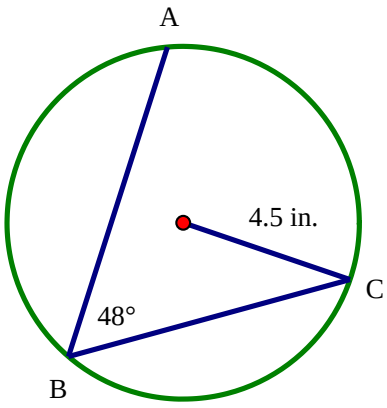

Arc Length = _____

18. Find the area of the **shaded** region.



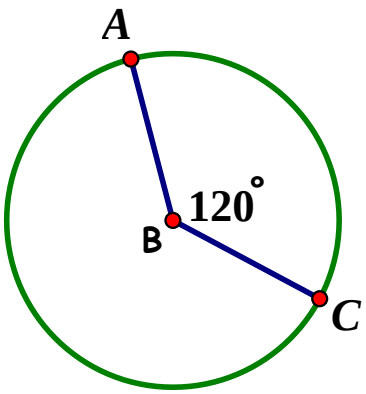

Area of sector = _____

19. Find the length of $AC$ in the following circle:



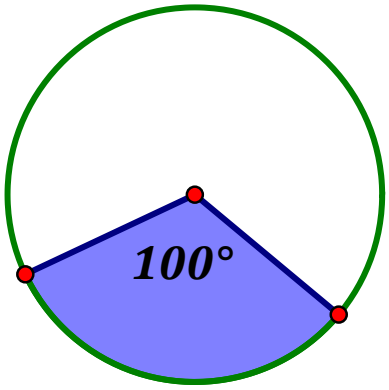

Arc Length = _____

20. What is the radius of the following circle if the arc length of *ABC* is $2\pi$ cm?




r = _____

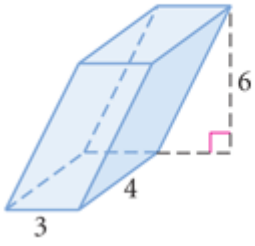
21. If the area of the sector is $22.5\pi\ cm^2$, find the radius.



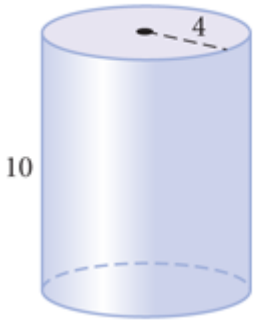

r = _____

Find the volume of each solid. All measurements are in inches. Round approximate answers to the nearest hundredths.

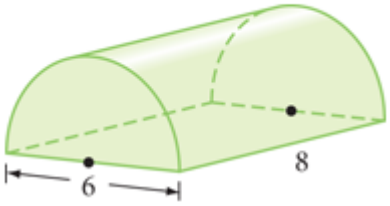
22. Oblique rectangular prism



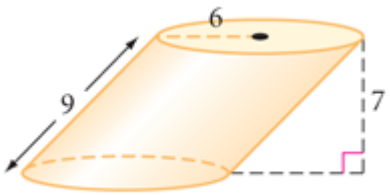

23. Right cylinder



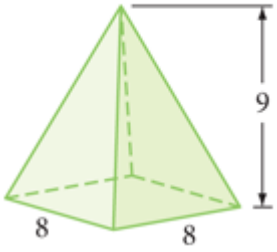
24. Right semicircular cylinder



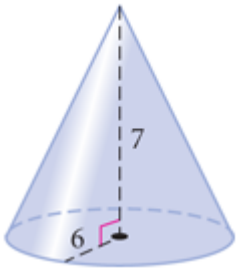

25. oblique cylinder



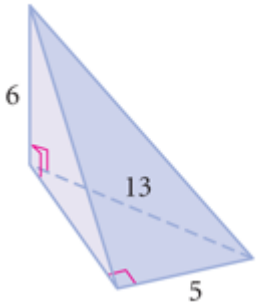

26. Square pyramid



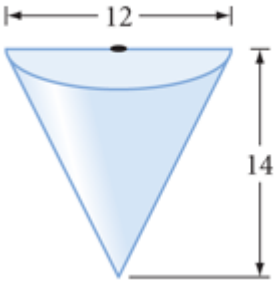

27. Cone



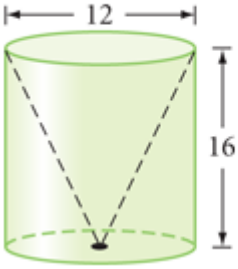

28. Triangular pyramid



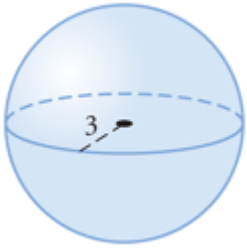

29. Semicircular cone



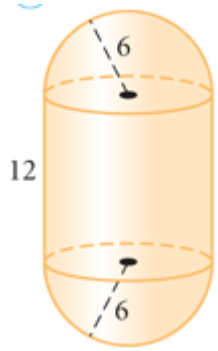

30. Cylinder with cone removed



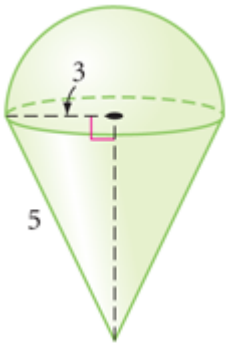

31.



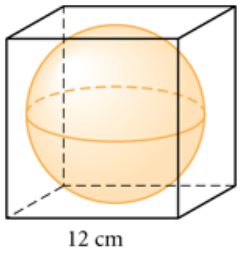
32.



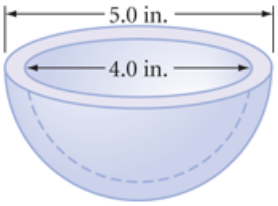

33.




34. As an exercise for her art class, Jasmine has cast a plaster cube 12 cm on each side. Her assignment is to carve the largest possible sphere from the cube. After the sphere is carved out, how much plaster is left?

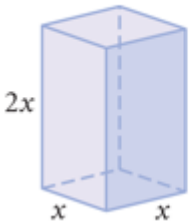



35. Find the volume of plastic (to the nearest cubic inch) needed for this hollow toy component. The outer-hemisphere diameter is 5.0 in. and the inner-hemisphere diameter is 4.0 in.

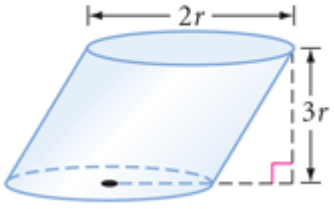



Express the volume of each solid.

36. Right rectangular prism




37. Oblique cylinder




38. Right rectangular prism with a rectangular hole