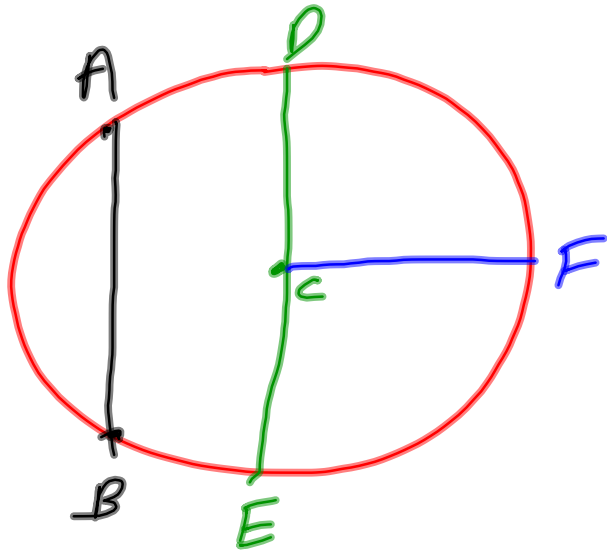


10.1 | Circles and Circumference

Circle - an infinite amount of points equidistant from a specific point called the **center**.



Name is
circle C
or $\odot C$
↑
circle symbol

\overline{AB} is a chord. It is a line segment with its endpoints on the circle.

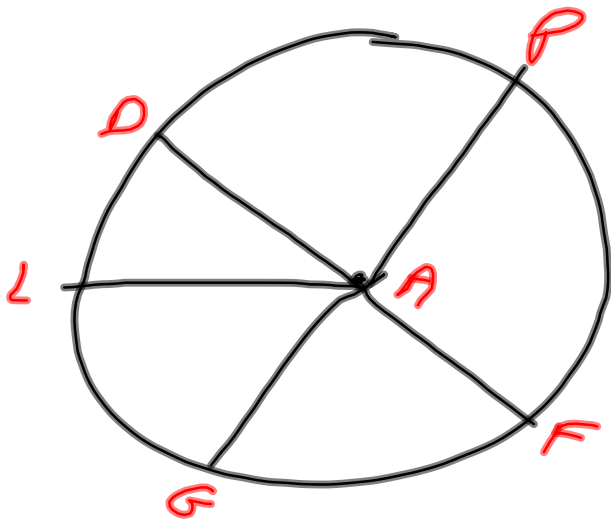
\overline{DE} is a diameter. It is a chord passing through the center of the circle.

A diameter is twice as long as the radius $d = 2r$

\overline{CF} is a radius. It is a line segment with an endpoint at the center and an endpoint on the circle.

A radius is $\frac{1}{2}$ the diameter.
 $r = \frac{1}{2}d$

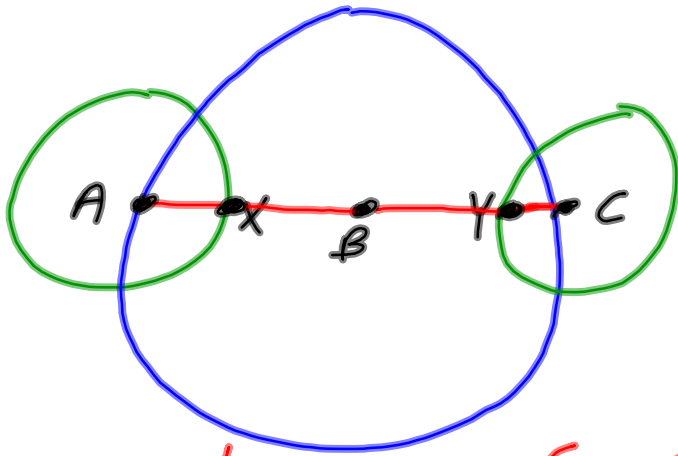
A circle is named after the center.



If $\overline{DF} = 10$, what is DA ?

If $\overline{PA} = 7$, find \overline{PG}

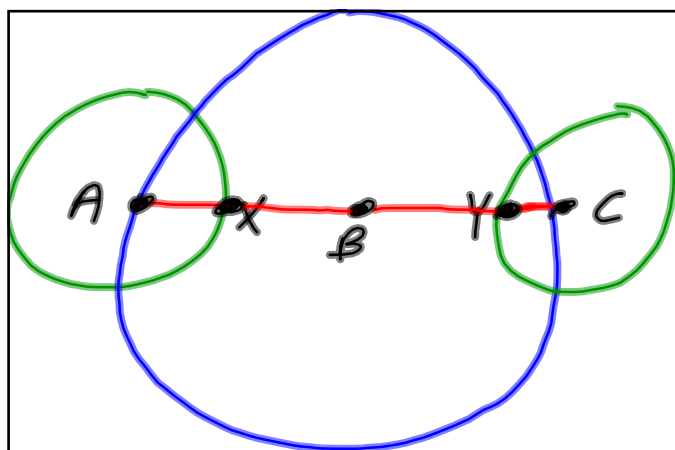
If $\overline{AG} = 12$, find AL



Diameters of $\odot A$, $\odot B$ and $\odot C$ are 10, 20, and 14 inches.

Ⓐ Find \overline{XB}

Ⓑ Find \overline{BY}



$$AX = 5 \quad CY = 7$$

$$AB = 20 \div 2 = 10$$

$$\begin{array}{r}
 AB \quad \quad 10 \\
 - AX \quad = -5 \\
 \hline
 BX \quad \quad 5
 \end{array}$$

$$C = \pi d \quad \text{or} \quad C = 2\pi r$$

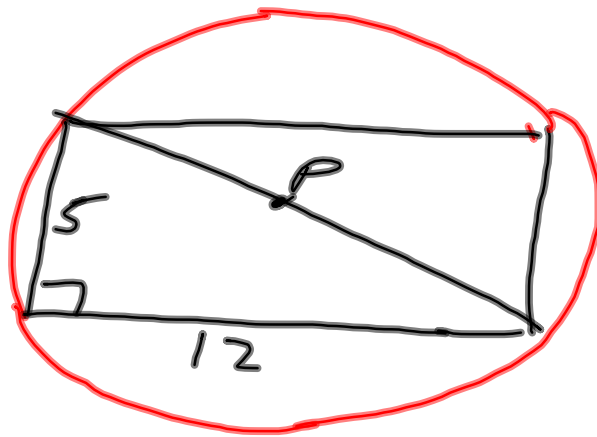
① What's C if $r = 7$

② What's C if $d = 12.5$

Sometimes the answer is left with π showing and sometimes convert using 3.14. Let's convert to a #.

what are r and d if
 $C=136.9$?

*



What is
the
circumference
of $\odot P$?