

10-1

Circles and Circumference

Terminology

Radius

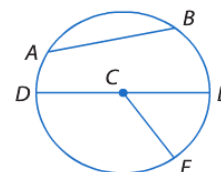
A segment whose endpoints are on the circle and in the center

Diameter

A segment whose endpoints are on the circle but must go through the center

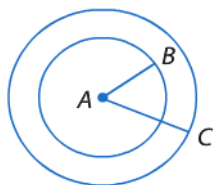
Chord

A segment whose endpoints are on the circle but does not need to go through the center.



Concentric Circles

Circles that are on the same plane and share a center.



Example $\odot A$ with radius \overline{AB}
and $\odot A$ with radius \overline{AC} are concentric.

Circumference

The distance around a circle (perimeter).

$$C = 2(\text{Pi})(\text{radius})$$

or

$$C = (\text{Pi})(\text{Diameter})$$

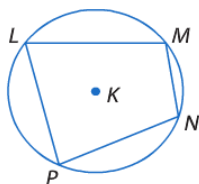
Inscribed vs Circumscribed

Inscribed

A polygon that is inside another figure, but all vertices must be on the figure

Circumscribed

A polygon that is outside another figure, but all the vertices must be on the figure



The diameters of $\odot A$, $\odot B$, and $\odot C$ are 8 inches, 18 inches, and 11 inches, respectively. Find each measure. $DG = 3$

Find:

- 1) AF
- 2) FB
- 3) BC

