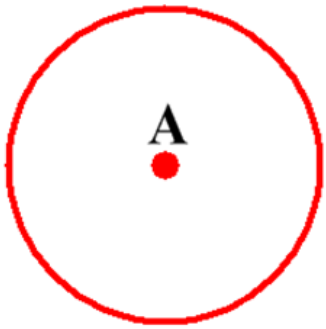
Def. Central Angle

An $\angle$ whose vertex is the center of a circle.

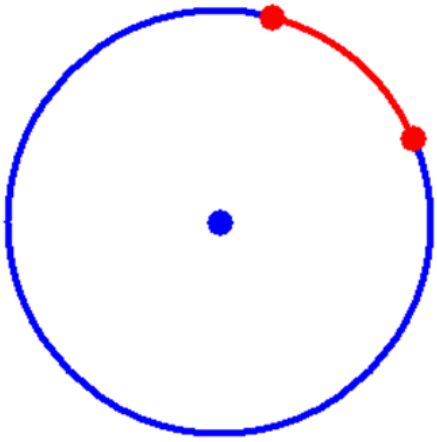


Sum of the central ∠'s

The sum of the measures of the central ∠'s of any circle with no common interior pts. is 360°.

Def. Arc

A part of a circle.



Def. of Arc Measure

The measure of an arc is the measure of its central ∠.

Minor Arc - An arc whose measure is less than 180°

Major Arc - An arc whose measure is greater than 180°

Semicircle - An arc whose measure is equal to 180°

Def. of ≅ circles

2 circles are ≅ if their radii are ≅.

Def. ≅ arcs

Arcs in the same circle or ≅ circles that have the same measure.

Th. 10.1

In the same circle or in ≅ circles, 2 arcs are ≅ iff their corresponding central angles are ≅.

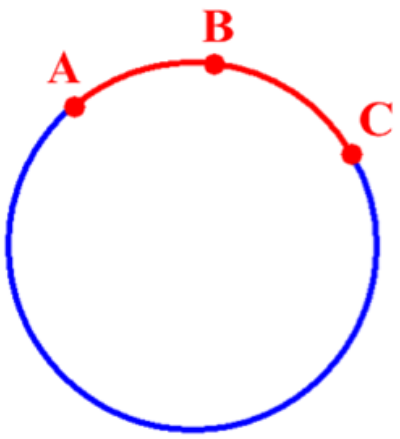
Post. 10.1 Arc Addition Postulate

The measure of an arc formed by 2 adj. arcs is the sum of the measures of the 2 arcs.

$m\overset{\frown}{AB} = 21°$

$m\overset{\frown}{BC} = 28°$

$m\overset{\frown}{AC} =$



Arc Length

The length of an arc can be found by:

$$l = \frac{m}{360}(2\pi r)$$

Where l is the length of the arc,
m is the measure of the arc,
and r is the radius of the circle.