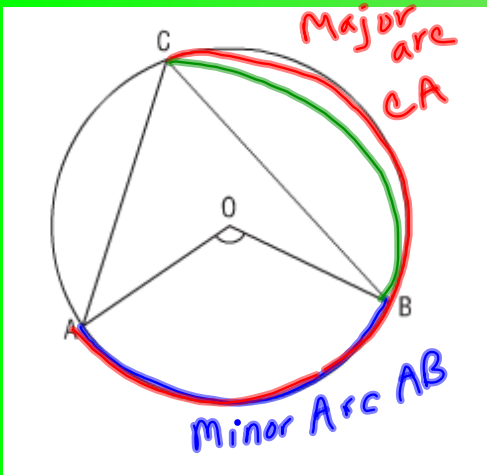


Section 8.3

Properties of Angles in a Circle



1) Name 2 chords
CB, CA

2) Name 2 angles

$\angle AOB$ $\angle OAB$
↑ central angle

3) Name 2 radii

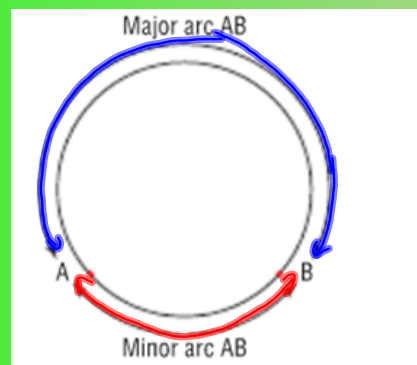
AO OB

$\angle ACB$
 $\angle CBD$

4) Name 2 arcs

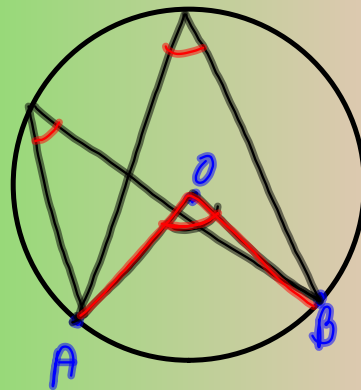
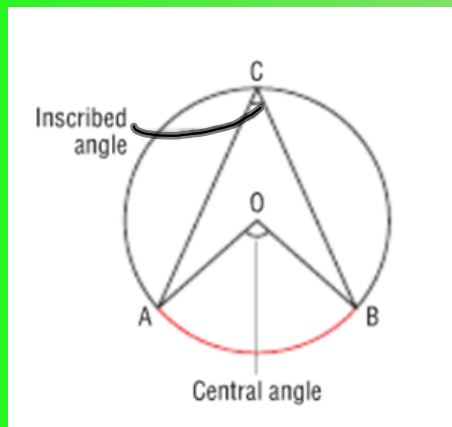
Terms/Properties to know:

Arc- a section of the circumference of a circle is an arc.



Central Angle-- the angle formed by joining the endpoints of an arc to the center of the circle

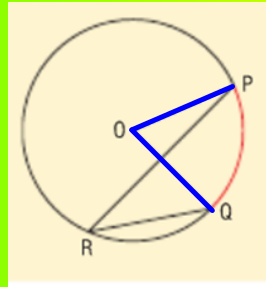
Inscribed Angle--The angle formed by joining the endpoints of an arc to a point on the circle



The inscribed and central angles are subtended by arc AB

Central Angle and Inscribed Angle Property

In a circle, the measure of a central angle subtended by an arc is twice the measure of the inscribed angle subtended by the same arc.



$$\angle POQ = 2 \text{ times } \angle PRQ$$

THIS IS TRUE FOR ANY INSCRIBED ANGLE

[The inscribed angle is half the size of the central angle]