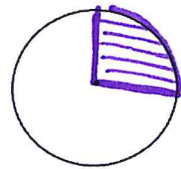
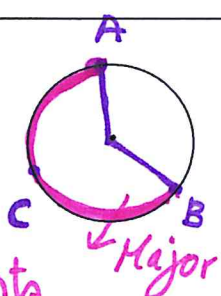


Arc: A piece of a Circle's edge.

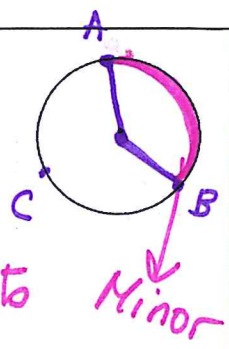


Sum of angles of a circle is 360°

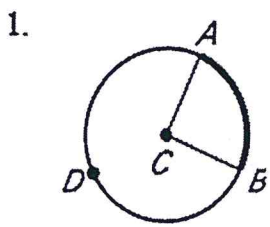
Major Arc:
Arc measure more than 180° .
Name: using 3 points
 \widehat{ACB}



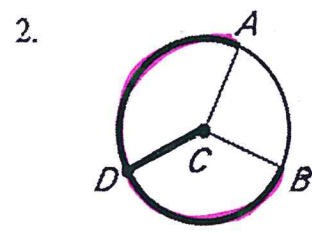
Minor Arc:
Arc measure less than 180° .
Name: using 2 points
 \widehat{AB}



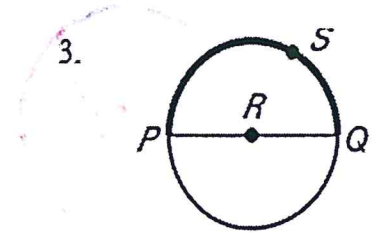
Examples:



\widehat{AB} minor Arc



\widehat{ADB} major Arc



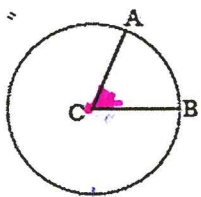
Major? Minor?
* Semi-Circle exactly 180°
3 points \widehat{PSQ}

Central Angles

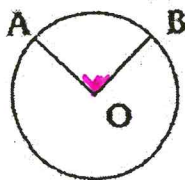
A Central angle is an angle whose Vertex is at the center of a circle. Its measure is Same as the Arc measure.

Example:

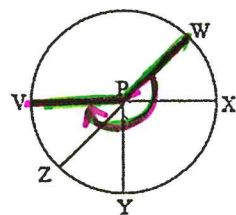
Name each given central angle:



$\angle ACB$



$\angle AOB$



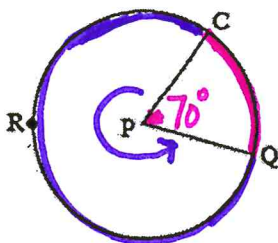
$\angle VPW ?$

$\angle WPX$

$\angle WPV$

Measure of an Arc:

In $\odot P$, $m\angle CPQ = 70^\circ$. Find $m\widehat{CQ}$ and $m\widehat{CRQ}$.



$$m\widehat{CQ} = m\angle CPQ = 70^\circ$$

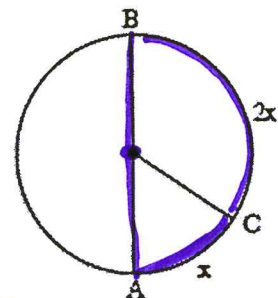
$$\angle CPQ = 360^\circ - 70^\circ = 290^\circ$$

$$m\angle CPQ = m\widehat{CRQ} = 290^\circ$$

"Central angle measure Same as Arc"

\widehat{AB} is a semicircle

In the circle shown below, the vertex of the angles is at the center. Find x .



$$\widehat{ACB} = 180^\circ$$

$$x + 2x = 180^\circ$$

$$\frac{3x}{3} = \frac{180^\circ}{3}$$

$$x = 60^\circ$$