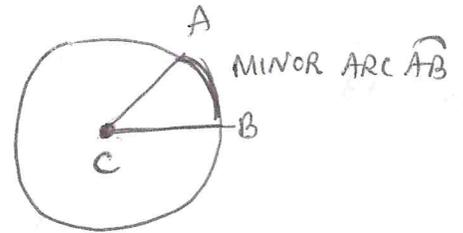


Mr.Reddy's Notes 10.2 Arc Measures

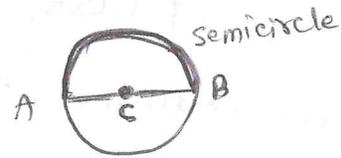
1) CENTRAL ANGLE:- ANGLE whose vertex is IN THE CENTER OF THE CIRCLE.



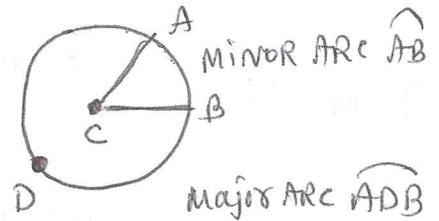
$\angle ACB$ IS THE CENTRAL angle of $\odot C$

2) IF $m\angle ACB$ Less than 180° , then the points that lie IN THE INTERIOR OF $\angle ACB$ FORM MINOR ARCS

3) IF $m\angle ACB = 180^\circ$, IT IS A Semi circle with an arc with endpoint which are the ends of diameter

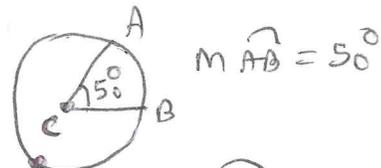


4) THE POINTS ON $\odot C$, that do NOT lie on MINOR ARC \widehat{AB} , form a MAJOR ~~circle~~ ARC with endpoints A and B.



NOTE:- MINOR ARCS: 2 letters
MAJOR ARCS: 3 letters.

5) THE MEASURE OF A MINOR ARC IS THE MEASURE OF central angle.



6) THE MEASURE OF MAJOR ARC D IS THE difference between 360° and the measure of MINOR ARC.
THE MEASURE of a Semicircle is 180° .

$$m\widehat{ADB} = 360^\circ - 50^\circ = 310^\circ$$

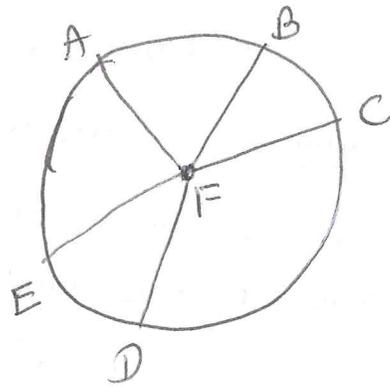
(7) Arc Addition postulate:- THE MEASURE OF AN ARC FORMED BY TWO Adjacent ARCS IS THE SUM OF THE MEASURES OF TWO ARCS.



$$m\widehat{ABC} = m\widehat{AB} + m\widehat{BC}$$

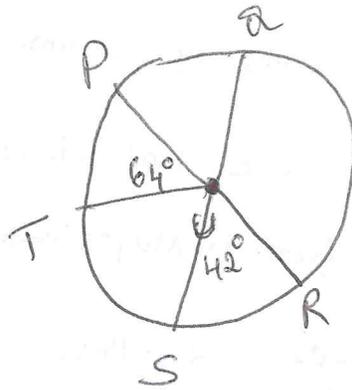
① IN $\odot F$, determine whether the given arc is a MINOR ARC, MAJOR ARC, OR SEMICIRCLE.

- 1. \widehat{AB}
- 2. \widehat{AE}
- 3. \widehat{EAC}
- 4. \widehat{ACD}



② IN THE FIGURE, \overline{PR} and \overline{QS} are diameters of $\odot U$. Find the measure of indicated arc.

- 5) $m\widehat{PQ}$
- 6) $m\widehat{ST}$
- 7) $m\widehat{TPS}$
- 8) $m\widehat{RT}$



③ \widehat{PQ} has a measure of 90° in $\odot R$. Find the length of \overline{PQ} .

