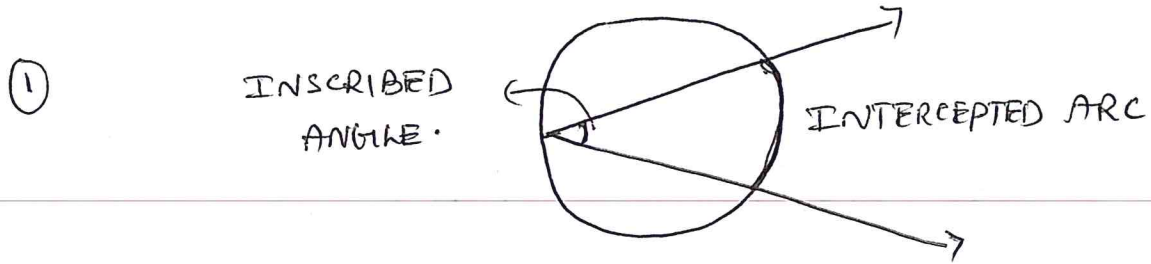
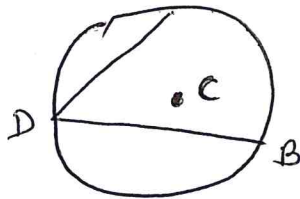


# Mr.Reddy's: 10.4 Inscribed Angles and Polygons: JMA



② MEASURE OF AN INSCRIBED ANGLE:-

INSCRIBED ANGLE IS HALF OF ITS INTERCEPTED ARC.

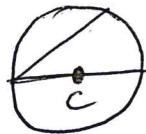


$$m\angle D = \frac{1}{2} m\widehat{AB}$$

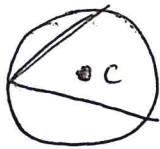
OR

$$m\widehat{AB} = 2m\angle D$$

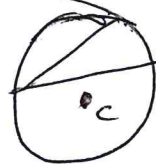
③



center 'c' IS on a side of INSCRIBED angle

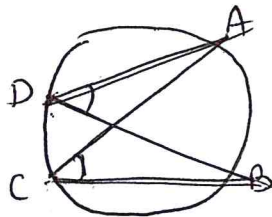


center C IS INSIDE the INSCRIBED ANGLE.



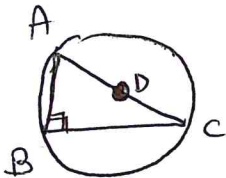
center C IS outside the INSCRIBED angle.

④ TWO INSCRIBED ANGLES  $\angle D$ ,  $\angle C$  INTERCEPT SAME ARC  $\widehat{AB}$ . THEN angles are congruent.



$$\angle ADB \cong \angle ACB$$

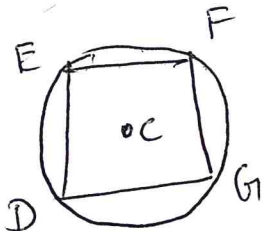
⑤  $\angle C$



$m\angle ABC = 90^\circ$ . iff  $\overline{AC}$  IS A DIAMETER OF  $\odot O$

$$m\angle D + m\angle F = m\angle E + m\angle G = 180^\circ$$

⑥ Quadrilateral:-



opposite angles are supplementary

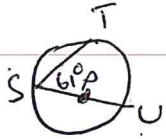
10.4 WORKSHEET:-

1) IN THE FIGURE, WHICH STATEMENT IS TRUE.

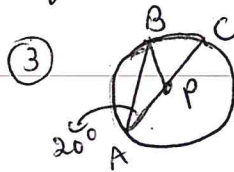


- A)  $\angle SPR \cong \angle PSQ$     B)  $\angle RQS \cong \angle RPS$   
 C)  $\angle RPS \cong \angle PRQ$     D)  $\angle PRQ \cong \angle SQR$

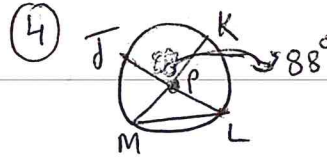
2. Find the Measure of Indicated angle or Arc in  $\odot P$ .



$m\widehat{ST} =$



$m\widehat{AB} =$

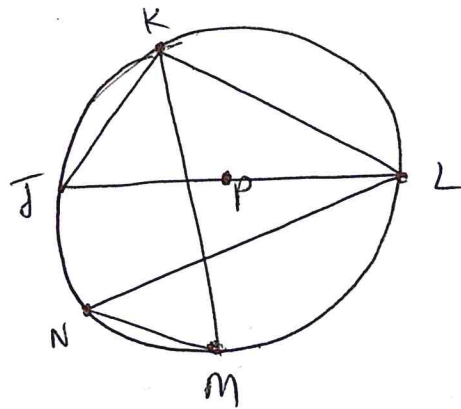


$m\angle JLM =$

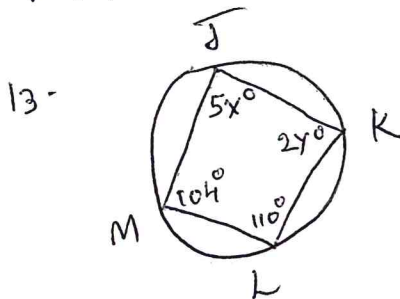
Find the Measure of the Indicated angle or Arc in  $\odot P$ , given

$m\widehat{LM} = 84^\circ$  and  $m\widehat{KN} = 116^\circ$ .

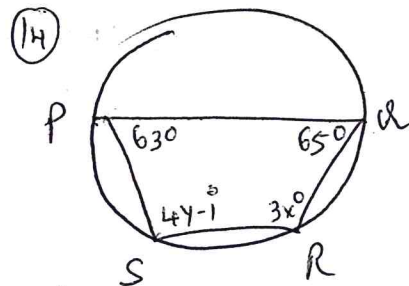
- 5)  $m\angle JKL =$     8)  $m\angle JKM =$   
 6)  $m\angle MKL =$     9)  $m\angle KLN =$   
 7)  $m\angle KMN =$     10)  $m\angle LNM =$   
 11)  $m\widehat{JK} =$   
 12)  $m\widehat{LKJ} =$



Find the Value of the Variables:



$x =$   
 $y =$



$x =$   
 $y =$