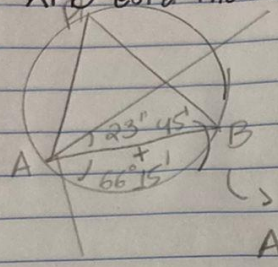
01 APB está inscrito na circuferência de centro C



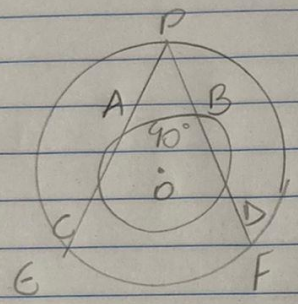
$A\hat{P}B = x$

$\rightarrow 90°$, Tangência A

$AB = 2 \cdot 66° 15 = 132° 30'$

$A\hat{P}B = \frac{132° 30'}{2} = 66° 15'$

02



$EF = 20°$

$A\hat{O}B = 40$

$A\hat{P}D = 20°$

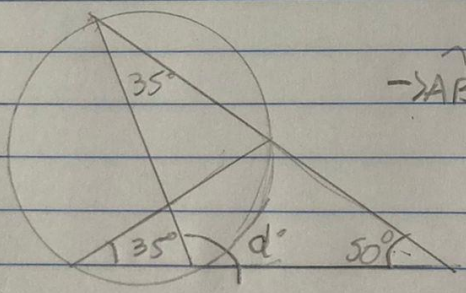
$20 + 20° + x = 180°$

$40° + x = 180°$

$P\hat{A}D \ x = 180° - 40 = 140°$

$\rightarrow CD = 2 \cdot 40° = 80°$

03

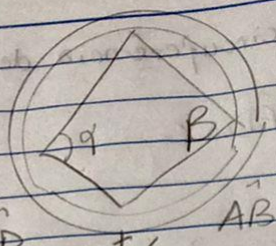


$\rightarrow \overset{\frown}{AB}$ $\quad 35° = \frac{AB}{2} = 35°$

$d + 35° + 50° = 180°$

$d = 180° - 50° - 35 = 95°$

4-



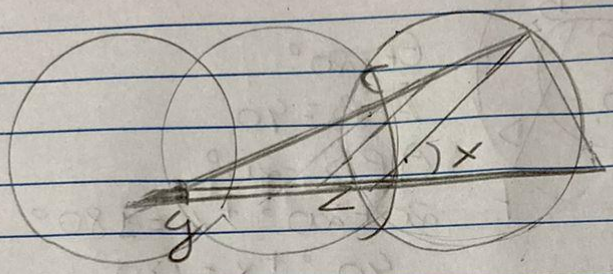
$\alpha = \frac{\overset{\frown}{AB}}{2}$ $\beta = \frac{\overset{\frown}{CD}}{2}$

$2\alpha \quad 2\beta$

$2\beta + 2\alpha = 2\pi$

$\beta + \alpha = \pi$

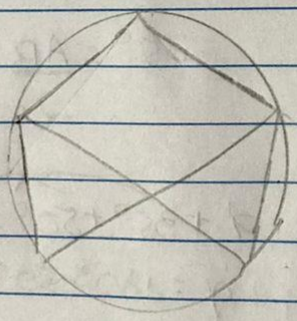
5-



$y = \frac{\overset{\frown}{CD}}{2} = y = \frac{x}{2}$ $- \quad y = \frac{x}{2} \cdot \frac{1}{2}$

$\frac{2}{1}$

6-



$\frac{x}{4}$

$z = 45° + 60° = 180°$

$z = 75°$

$60° = \frac{\overset{\frown}{AE} + \overset{\frown}{CD}}{2} = 120°$

$45° = \frac{\overset{\frown}{ED}}{2} = 90°$

$y = \frac{120° + 90°}{2} = 210° = y = 105°$