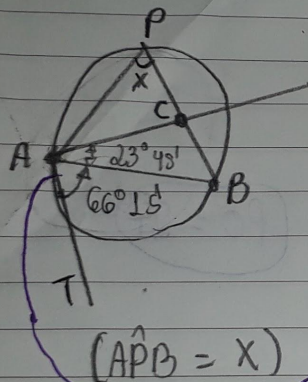


1-



A é um ponto de tangência

$\widehat{TA\hat{B}}$  é um Ângulo de segmento, então

$$AB = 2.66^\circ 15' \rightarrow AB = 132^\circ 30'$$

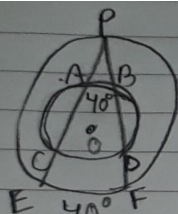
$$\hat{APB} = \frac{AB}{2} \rightarrow \hat{APB} = \frac{132^\circ 30'}{2}$$

$X$  é igual à medida do ângulo do segmento  $AB$

$$\angle APB = 66^\circ 25'$$

### Alternative (E)

2-



→  $\hat{EPF} = 20^\circ$  (inscrito no ângulo central EOF  $(\frac{40^\circ}{2})$ )

$\hat{A}OB = 40^\circ$ ,  $AOB = 200^\circ$  (Ângulo central  $AOB$ )

$$\angle PBD = 20^\circ$$

$$\hat{PAB} = 20^\circ + 20^\circ + x = 180^\circ \quad \left( \begin{array}{l} \text{Soma dos} \\ \text{Ângulos internos} \end{array} \right)$$

$$\hat{P}_{AD} = X = 180^\circ - 40^\circ$$

$$\widehat{PAD} = x = 140^\circ$$

$$\hat{C}\hat{A}\hat{D} = 40^\circ \text{ (pois é externo ao ADP. (CAP} = 180^\circ \text{ e DAP} = 140^\circ))$$

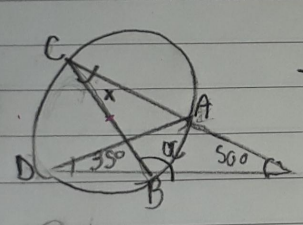
↳ inscrita na menor circunferência e corresponde ao arco CB, ou ao COD.

$$\angle COB = \angle AOC = 2 \cdot 46^\circ$$

## Alternativa

(E)

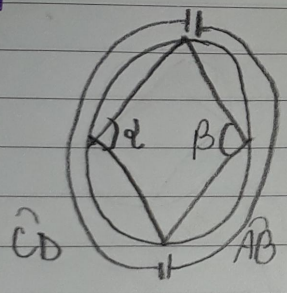
3-



$35^\circ = \frac{\widehat{AB}}{2}$   
 $\widehat{X} = \frac{\widehat{AB}}{2} = 35^\circ$

$\alpha + 35^\circ + 50^\circ = 180^\circ$   
 $\alpha = 180^\circ - 50^\circ - 35^\circ$   
 $\alpha = 180^\circ - 85^\circ$   
 $\alpha = 95^\circ$  Alternativa (A)

4-



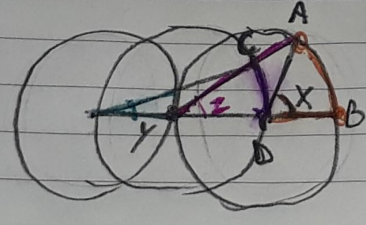
$\alpha = \frac{\widehat{AB}}{2} \rightarrow \widehat{AB} = 2\alpha$   
 $\beta = \frac{\widehat{CD}}{2} \rightarrow \widehat{CD} = 2\beta$

$\widehat{CD} + \widehat{AB} = 2\pi$   
 $2\beta + 2\alpha = 2\pi \quad (\div 2)$

$\beta + \alpha = \pi$  Alternativa (C)

$\rightarrow 2\pi$  é igual a  $360^\circ$

5-



$x = \widehat{AB} \quad \left\{ \begin{array}{l} z = \frac{x}{2} \\ z = \frac{\widehat{CD}}{2} \end{array} \right.$

$\widehat{CD} = \frac{x}{2}$

$y = \frac{\widehat{CD}}{2} \rightarrow y = \frac{x}{2} \rightarrow y = \frac{x}{2} \cdot \frac{1}{2} = y = \frac{x}{4}$

