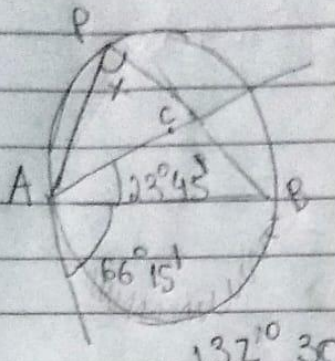


# ARCOS E ÂNGULOS NA CIRCUNFERÊNCIA

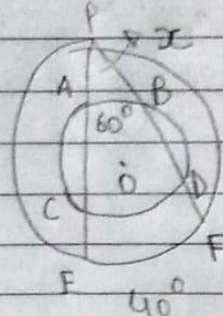
## TAREFA BÁSICA

①



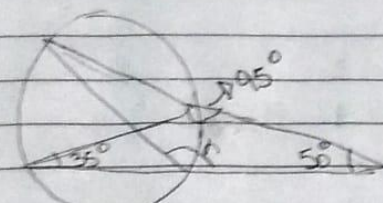
$23^{\circ}45' + 66^{\circ}15' = 89^{\circ}60' = 90^{\circ}$   
 APB âng inscrito  
 $AB = 2 \cdot 66^{\circ}15' = 132^{\circ}30'$   
 $x = 132^{\circ}30' = 166^{\circ}15' \text{ (E)}$   
 2

②



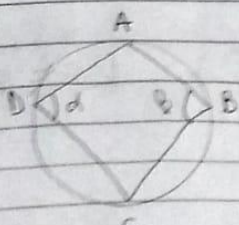
$x = 40^{\circ} = 20^{\circ}$   
 2  
 $20^{\circ} = \frac{CD - 40^{\circ}}{2}$   
 $40^{\circ} = CD - 40^{\circ}$   
 $-CD = -40^{\circ} - 40^{\circ}$   
 $-CD = -80^{\circ} \quad (\times 1)$   
 $|CD = 80| \text{ (E)}$   
 $\widehat{CAD} = 40^{\circ}$   
 $\widehat{COD} = m\widehat{CD} = 2 \cdot 40^{\circ} = 80^{\circ}$

③



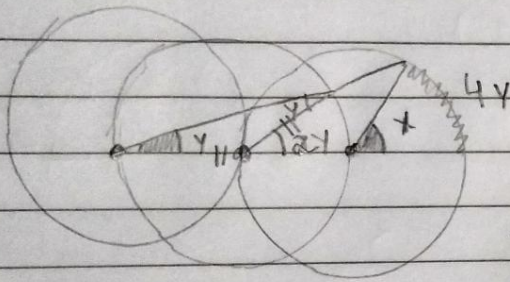
$35^{\circ} + \alpha + 50^{\circ} = 180$   
 $\alpha = 95^{\circ} \text{ (A)}$

④



$\alpha = \frac{AB}{2}, \beta = \frac{CD}{2}, \alpha + \beta = \frac{AB + CD}{2}$   
 $\alpha + \beta = \frac{AB + CD}{2} = \frac{2\pi}{2} = \pi \text{ (C)}$

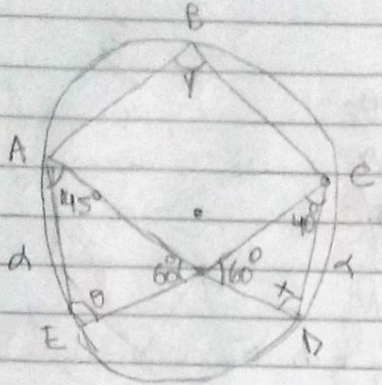
⑤



$$Y = \frac{4x}{4}$$

$$Y + Y = 2Y$$

⑥



$$ED = 2 \cdot 45^\circ = 90^\circ$$

$$\widehat{ABC} = 2 \cdot 75^\circ$$

$$ABC = 150^\circ$$

$$\theta = 180^\circ - 45^\circ - 60^\circ$$

$$\theta = 75^\circ$$

$$150^\circ + 90^\circ + 2\alpha = 360^\circ$$

$$2\alpha = 120^\circ$$

$$\alpha = 60^\circ$$

$$Y = \frac{2\alpha + 90^\circ}{2}$$

$$2$$

$$Y = \frac{2 \cdot 60 + 90^\circ}{2}$$

$$Y = 210$$

$$2$$

$$Y = 105$$

$$x = \frac{ABC}{2} = \frac{150^\circ}{2} = 75^\circ$$

$$2$$

$$2$$