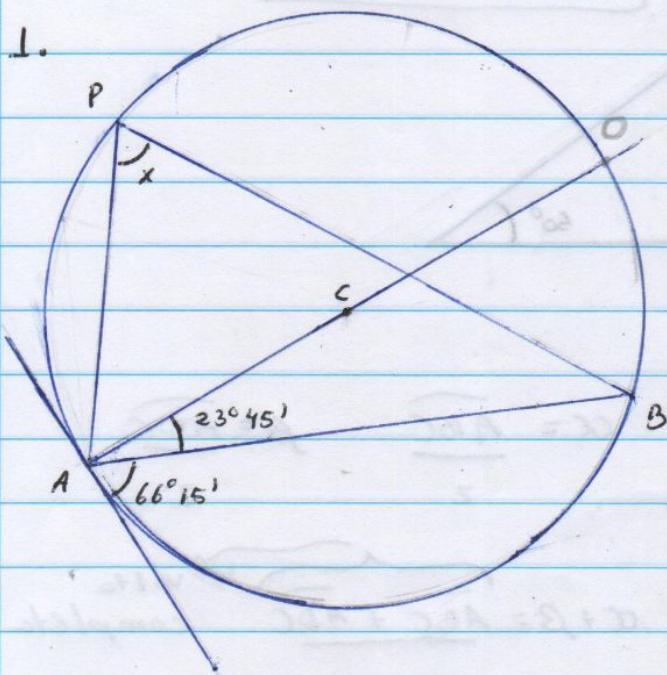


Tarefa Básica

1.



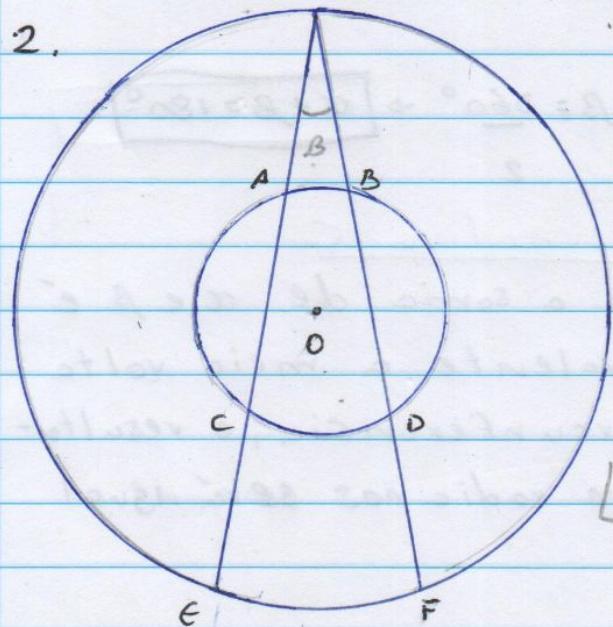
$$\widehat{OB} = 23^\circ 45' \cdot 2 \Rightarrow \widehat{OB} = 47^\circ 30'$$

$$\widehat{AB} = 180^\circ - 47^\circ 30' \Rightarrow \widehat{AB} = 132^\circ 30'$$

$$x = 132^\circ 30' \Rightarrow x = 66^\circ 15'$$

[Alternativa E]

2.



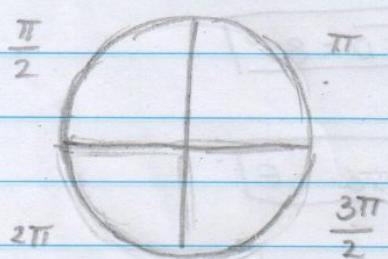
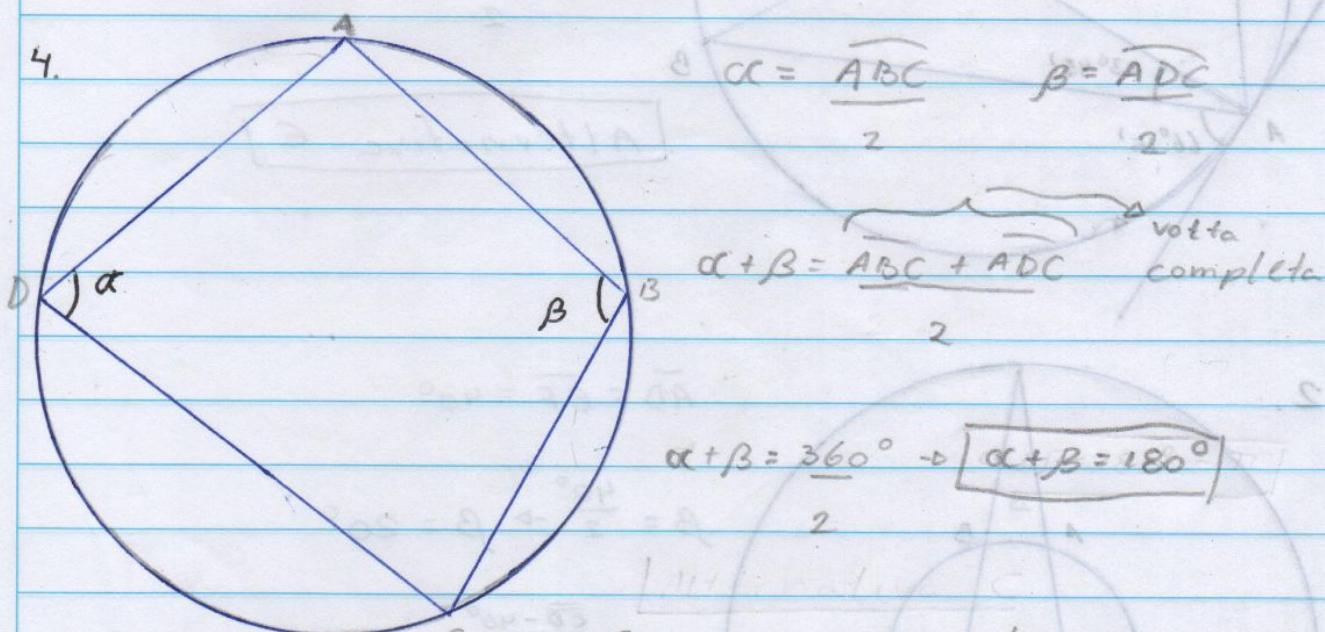
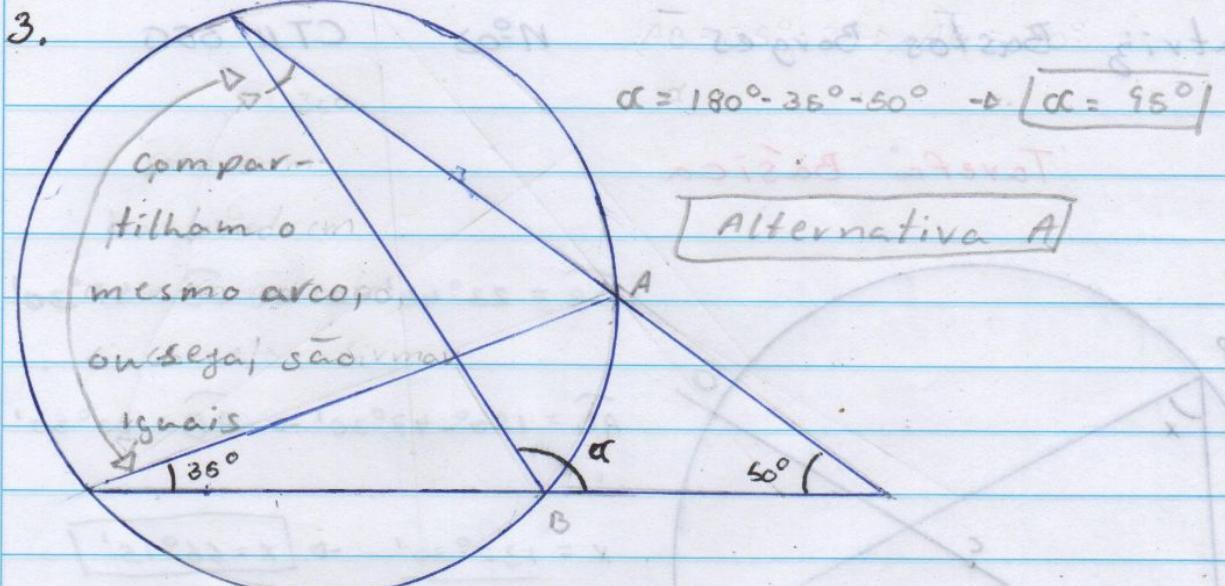
$$\widehat{AB} = \widehat{EF} = 40^\circ$$

$$\beta = \frac{40^\circ}{2} \Rightarrow \beta = 20^\circ$$

$$20^\circ = \frac{\widehat{CD} - 40^\circ}{2} \Rightarrow \widehat{CD} = 40^\circ + 40^\circ$$

$$\boxed{\widehat{CD} = 80^\circ}$$

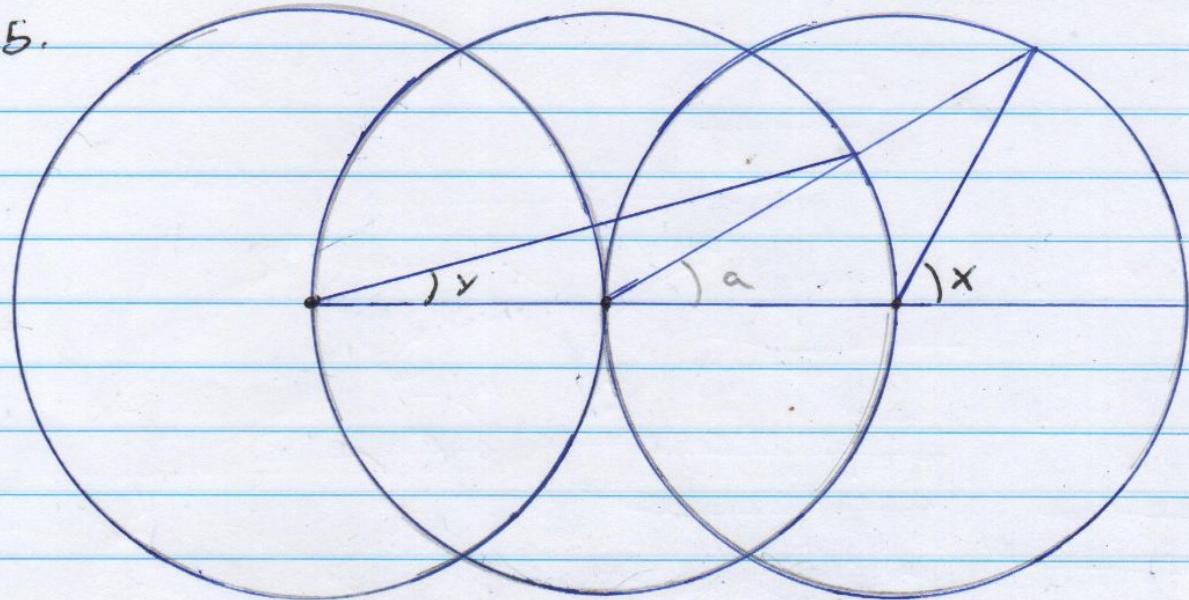
[Alternativa E]



Como a soma de α e β é equivalente a meia volta da circunferência, o resultado em radianos será igual

Alternativa C)

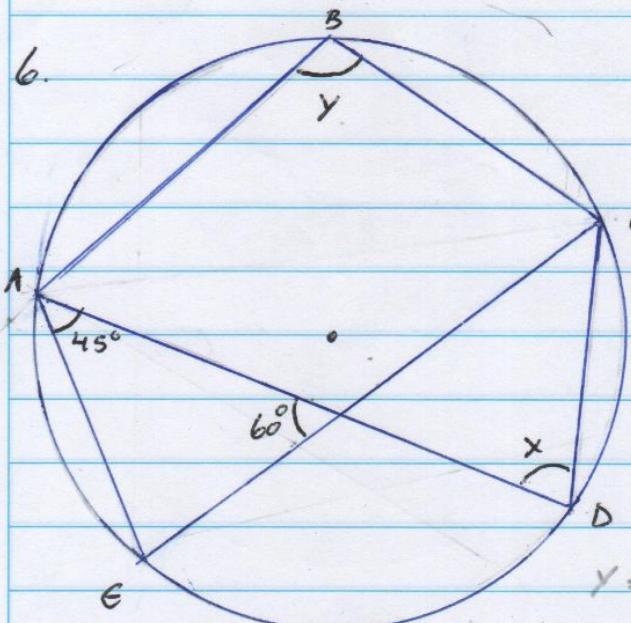
5.



x é um ângulo central, ou seja, o valor de x será igual ao de seu arco

$$a = \frac{x}{2} \quad y = \frac{x}{2} \rightarrow y = \frac{x}{2} \cdot \frac{1}{2} \rightarrow \boxed{y = \frac{x}{4}}$$

6.



\hat{AEC} e \hat{BDC} compartilham o mesmo arco, então são congruentes.

$$x = 180^\circ - 60^\circ - 45^\circ \rightarrow \boxed{x = 75^\circ}$$

$$\overline{ABC} = 75^\circ \cdot 2 \rightarrow \overline{ABC} = 150^\circ$$

$$y = \frac{(360^\circ - 150^\circ)}{2} \rightarrow y = \frac{210^\circ}{2}$$

$$\boxed{y = 105^\circ}$$