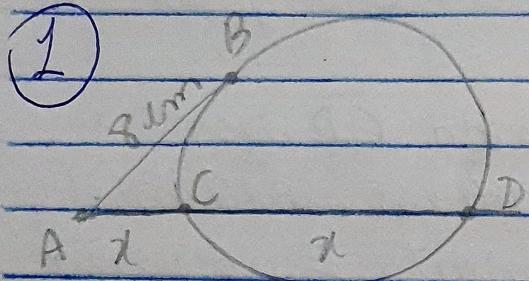


Tópico Básico: Potência de 1 ponto

Nome: Bárbara V. Grosse, CTII 350.

①

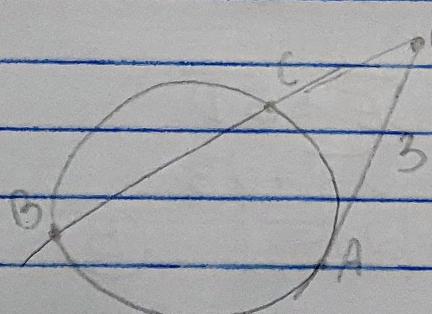


$$\begin{aligned} \overline{AC} \cdot \overline{AD} &= (\overline{AB})^2 \\ x \cdot 2x &= 8^2 \\ 2x^2 &= 64 \\ x^2 &= \frac{64}{2} \\ x &= \sqrt{32} \end{aligned}$$

(E)

$$*32 = 2^5 = 2^2 \cdot 2^2 \cdot 2$$

②



$$\begin{aligned} \overline{PC} \cdot \overline{PB} &= (\overline{PA})^2 \\ \overline{PC} \cdot \overline{PB} &= (3\overline{PC})^2 \\ \overline{PC} \cdot \overline{PB} &= 9(\overline{PC})^2 \\ \overline{PB} &= \frac{9 \cdot \overline{PC} \cdot \overline{PC}}{\overline{PC}} \end{aligned}$$

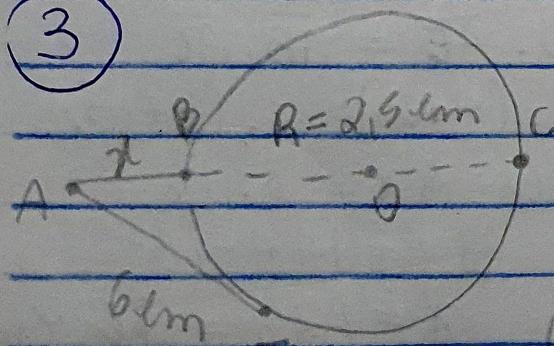
$$*\overline{PA} = 3\overline{PC}$$

$$\overline{PB} = 9\overline{PC}$$

(B)

(C)

③



\overline{BC} = diâmetro

$$\text{diâmetro} = 2R = 2 \cdot 2,5$$

$$= 5 \text{ cm}$$

$$\overline{AB} \cdot \overline{AC} = (\overline{AT})^2$$

$$x \cdot (x+5) = 6^2$$

$$\Delta = 5^2 - 4 \cdot 1 \cdot (-36)$$

$$x^2 + 5x - 26 = 0$$

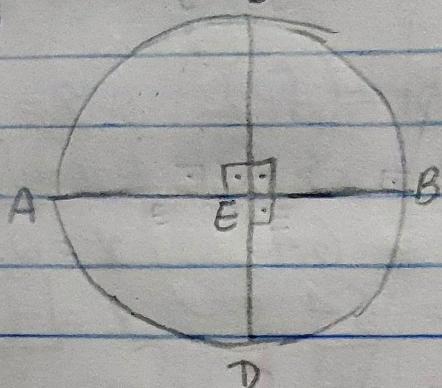
$$\Delta = 25 + 144 = 169$$

$$x_1 = \frac{-5 + \sqrt{169}}{2 \cdot 1} = \frac{-5 + 13}{2} = \frac{8}{2} = 4 \text{ cm}$$

(E)

$$x_{11} = -\frac{5-\sqrt{169}}{2} = \frac{-5-13}{2} = \frac{-18}{2} = -9$$

(4)



$$\overline{AE} \cdot \overline{EB} = 3, \quad \overline{CD} = ?$$

* Pelo teorema \overline{CD} é um
pendular ao diâmetro
 \overline{AB} no ponto E , o ponto
 E é seu ponto médio

↳ Isso significa que $\overline{CE} = \overline{ED} (= x)$

$$\overline{AE} \cdot \overline{EB} = \overline{CE} \cdot \overline{ED}$$

$$3 = x \cdot x$$

$$x^2 = 3$$

$$x = \sqrt{3}$$

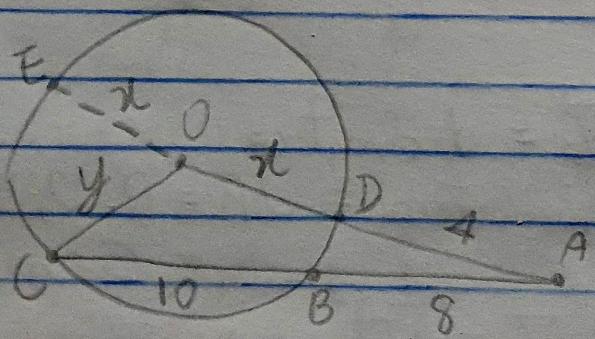
$$\overline{CD} = \overline{CE} + \overline{ED}$$

$$\overline{CD} = \sqrt{3} + \sqrt{3}$$

$$\overline{CD} = 2\sqrt{3}$$

(B)

(5)



$$\overline{AD} \cdot \overline{AE} = \overline{AB} \cdot \overline{AC}$$

$$4 \cdot (4+2x) = 8 \cdot (8+10)$$

$$16 + 8x = 8 \cdot 18$$

$$8x = 144 - 16$$

$$x = \frac{128}{8} = 16 \text{ cm}$$

$y = x$ = raio do circunferência

$$\text{Perímetro} = \overline{CO} + \overline{AO} + \overline{AC}$$

$$= 16 + (16+4) + (8+10)$$

$$= 16 + 20 + 18$$

RESPOSTA

$$= 54 \text{ cm}$$

(E)

AFAPEL