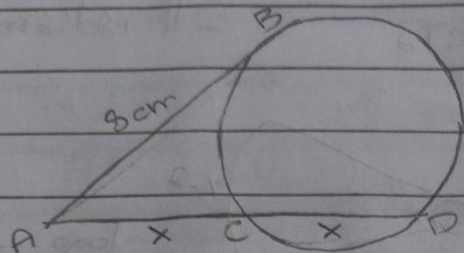


Tarefa Básica - Aula 8

1.



$$8 \cdot 8 = x \cdot 2x$$

$$2x^2 = 64$$

$$x^2 = 32$$

$$x = \sqrt{32}$$

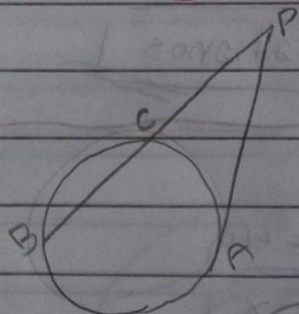
$$x = \sqrt{2^2 \cdot 2^2 \cdot 2}$$

$$\boxed{x = 4\sqrt{2} \text{ cm}}$$

$$\begin{array}{r|l} 32 & 2^5 \\ \hline 16 & 2^4 \\ 8 & 2^3 \\ 4 & 2^2 \\ 2 & 2^1 \\ 1 & \end{array}$$

(E)

2.



$$\overline{PA}^2 = \overline{PB} \cdot \overline{PC}$$

$$(3\overline{PC})^2 = \overline{PB} \cdot \overline{PC}$$

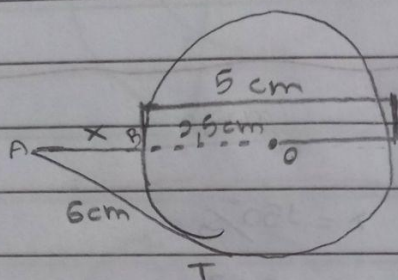
$$9\overline{PC}^2 = \overline{PB} \cdot \overline{PC} \rightarrow \overline{PC} = \overline{PB}$$

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

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

(B)

3.



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

$$5x + x^2 = 36$$

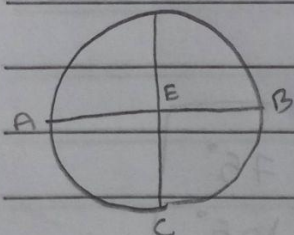
$$x^2 + 5x - 36 = 0$$

$$\frac{-5 \pm \sqrt{25 + 144}}{2} = \frac{-5 \pm 13}{2}$$

$$\frac{-5 + 13}{2} = 4 \quad \frac{-5 - 13}{2} = -9$$

(E)

4.



$$\overline{EA} \cdot \overline{EB} = \overline{EC} \cdot \overline{ED}$$

$$3 \cdot 3 = \overline{EC} \cdot \overline{ED}$$

$$\overline{EC} = \overline{ED}$$

$$3 = \overline{EC} \cdot \overline{EC} = \overline{EC}^2$$

$$\overline{EC} = \sqrt{3}$$

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

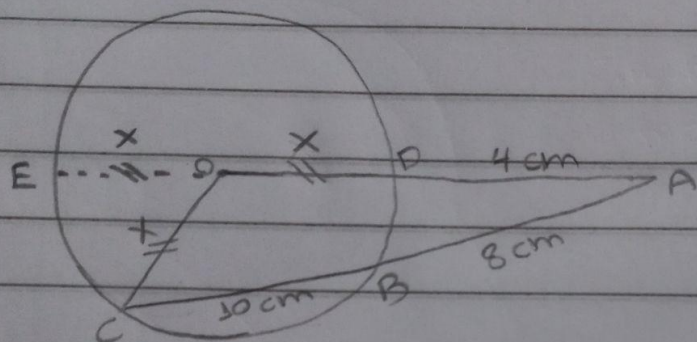
$$\overline{CD} = \overline{EC} + \overline{EC}$$

$$\overline{CD} = 2\overline{EC}$$

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

(B)

5.



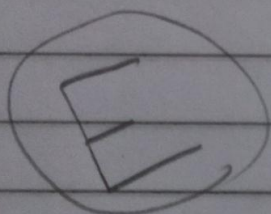
$$\overline{AD} \cdot \overline{AE} = \overline{AB} \cdot \overline{AC}$$

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

$$16 + 8x = 144$$

$$x = \frac{128}{8}$$

$$x = 16$$



$$2p = \overline{AD} + \overline{DC} + \overline{AC}$$

$$2p = (4 + 16) + (16) + (8 + 10)$$

$$2p = 20 + 16 + 18$$

$$2p = 54$$