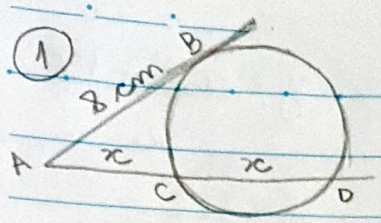
① 

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

$64 = x \cdot 2x$

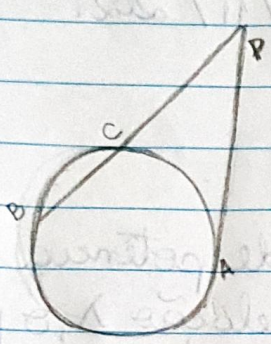
$2x^2 = 64$

$x^2 = 32$

$x = 4\sqrt{2}$

32	2
16	2
8	2
4	2
2	2
1	

Alternativa (E)

② 

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

$3\overline{PC} \cdot 3\overline{PC} = \overline{PC} \cdot \overline{PB}$

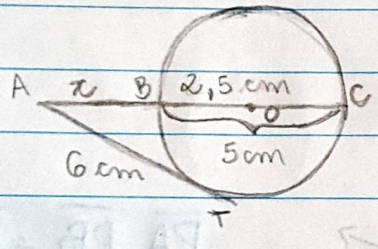
$9(\overline{PC})^2 = \overline{PC} \cdot \overline{PB}$

$\overline{PB} = \frac{9(\overline{PC})^2}{\overline{PC}}$

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

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

Alternativa (B)

③ 

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

$x \cdot (5 + x) = 36$

$5x + x^2 = 36$

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

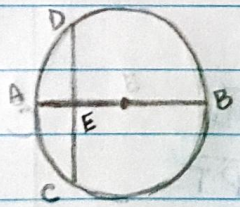
$\Delta = 25 - 4 \cdot 1 \cdot -36$

$\Delta = 169$

$x = \frac{-5 \pm 13}{2}$

$x = \frac{8}{2} = 4$

Alternativa (E)

④ 

$\overline{AE} \cdot \overline{EB} = 3$

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

$\overline{AE} \cdot \overline{EB} = (\overline{CE})^2$

$(\overline{CE})^2 = 3$

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

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

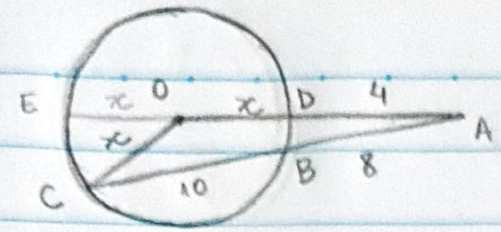
$\overline{CE} = \frac{\overline{CD}}{2}$

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

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

Alternativa (B)

(5)



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

$8 \cdot 18 = 4 \cdot (4 + 2x)$

$144 = 16 + 8x$

$8x = 128$

$x = 16$

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

$2p = 54$ cm

Alternativa (E)