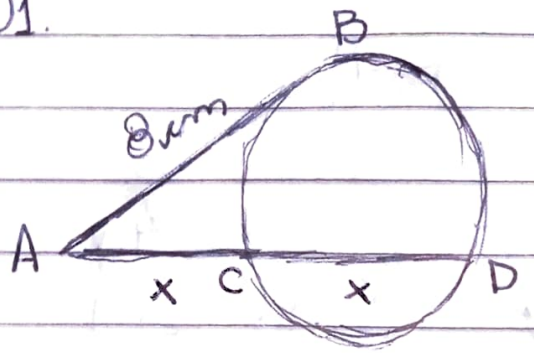
Tarefa Básica
Potência de um ponto

01.



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

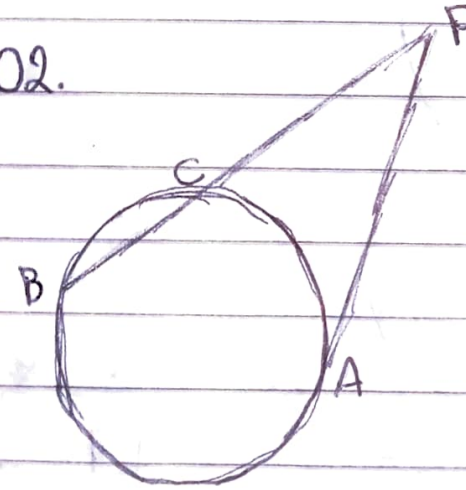
$64 = 2x^2$

$x^2 = 32$

$x = \sqrt{32}$

$\boxed{x = 4\sqrt{2}\ cm}$ (E)

02.



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

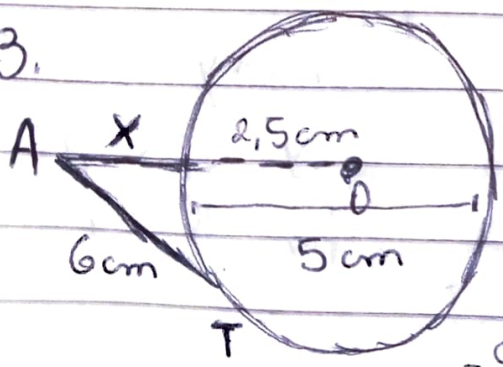
$(3\overline{PC})^2 = \overline{PB} \cdot \overline{PC}$

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

$9PC = PB$

$\boxed{PB = 9PC}$ (B)

03.



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

$5x + x^2 = 36$

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

não convém

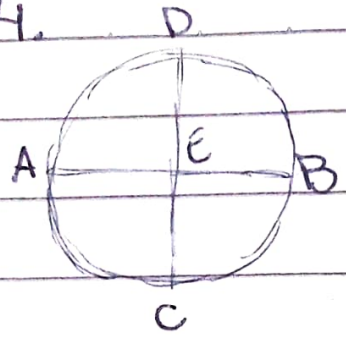
$-9 + 4 = -5$ $\quad x' = -9$

$-9 \cdot 4 = -36$ $\quad \boxed{x'' = 4}$

(E)

$EC = ED$

04.



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

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

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

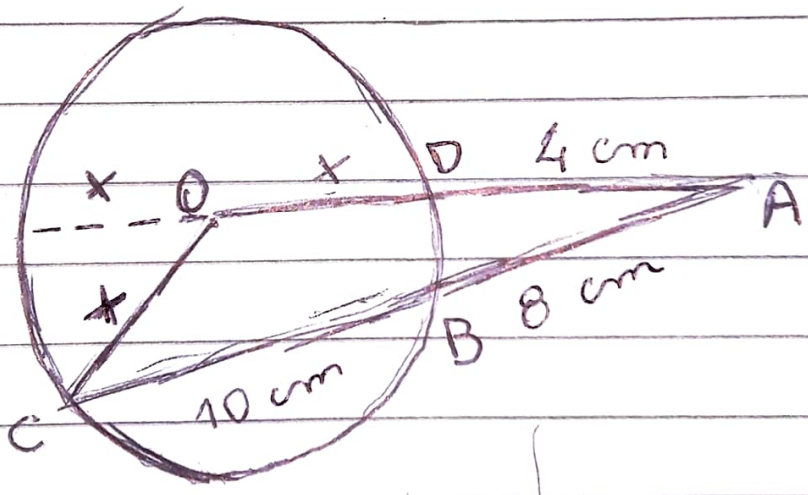
$\overline{EC} = \sqrt{3}$

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

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

$\overline{CD} = 2\overline{EC}$ $\therefore \boxed{\overline{CD} = 2\sqrt{3}}$ (B)

05.



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

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

$16 + 8x = 144$

$x = 128/8$

$x = 16$

$2p = \overline{AO} + \overline{OC} + \overline{AC}$

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

$2p = 20 + 16 + 18$

$\boxed{2p = 54}$ (E)