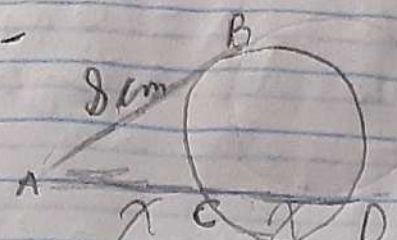
Tarefa Básica - Potência de um Ponto

01-



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

$8^2 = x(x+x)$

$64 = x \cdot 2x$

$64 = 2x^2$

$32 = x^2$

$\sqrt{32} = x$

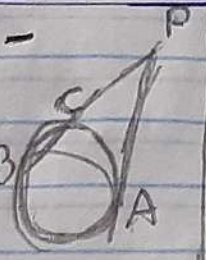
$4\sqrt{2} = x$

$AC = CD = x$

$AD = (AC + CD)$

(E)

02-



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

$\overline{PB} = (PC + CB)$

$PA^2 = PB \cdot PC$

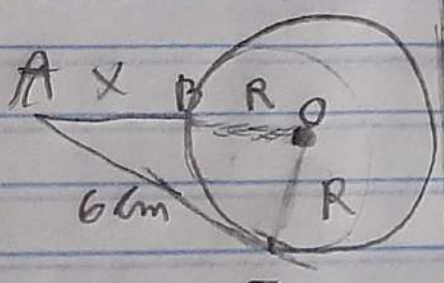
$3PC^2 = PB \cdot PC$

$\frac{3PC^2}{PC} = PB$

$3PC = PB$

(B)

03-



$R = 2,5\ cm$

$AT = 6\ cm$

$AB = ?$

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

$6^2 = 4x^2 - 10x + \frac{25}{2}$

$4x^2 - 10x - \frac{47}{2} = 0 \cdot 2$

$8x^2 - 20x - 47 = 0$

$\Delta = (-20)^2 - 4 \cdot 8 \cdot -47$

$\Delta = 400 + 1504$

$\Delta = 1904$

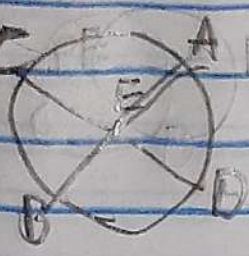
$x = \frac{+20 \pm 43,6}{16}$

$x1 = 3,93 \approx 4$ cm

$x2 = -1,43$ X

(E)

04- $AE \cdot EB = 3$



$CE = ED$

$CE \cdot ED = AE \cdot EB = 3$

$CE^2 = 3$

$CE = \sqrt{3}$

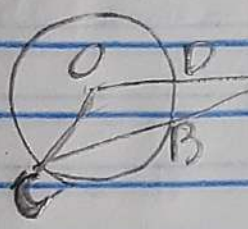
$CD = CE + ED$

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

$CD = 2\sqrt{3}$

(B)

05-



$AB = 8\,cm$

$BC = 10\,cm$

$AD = 4\,cm$

$AE \cdot AD = AC \cdot AB$

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

$16 + 8R = 144$

$8R = 128$

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

$R = 16$

$AC + CO + OA$

$18 + 16 + 20$

Perímetro $= 54\,cm$

(E)