Lista 26 - Potência de um ponto

① $AB^2 = AC \cdot AD$

$AB = 8cm$

$AC = CD = x$

$AD = (AC + CD)$

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

$64 = x \cdot 2 \cdot x$

$64 = 2 \cdot x^2$

$64/2 = x^2$

$x^2 = 32 \Rightarrow x = \sqrt{32}$

$x = 4\sqrt{2}$,,

Letra E

② $PA = 3PC$

$\frac{PB}{PA} = \frac{PA}{PC} \Rightarrow \frac{PA^2}{} = PB \times PC$

Letra B

$(3PC)^2 = PB \times PC$

$9PC^2 = PB \times PC$

$9PC = PB$

$PB = 9PC$

③ $6^2 = x \cdot (5+x)$

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

↳ $x_1 = 4$,,

↳ $x_{11} = -9$

Letra E

④ $AE \cdot EB = 3$

$CE = ED$

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

$CE^2 = 3$

$CE = \sqrt{3}$

$CD = CE + ED = \sqrt{3} + \sqrt{3} = 2\sqrt{3}$

Letra B

⑤ $AE \cdot AD = AC \cdot AB$

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

$16 + 8R = 144$

$8R = 128$

$R = 16$

Perimetro:

$AC + CO + OA = 18 + 16 + 20 = 54$,,

Letra E