Tarefa Básica - Potência de um ponto

01 $PA \cdot PB = PC \cdot PD$

$8 \cdot 8 = x \cdot (x + x)$

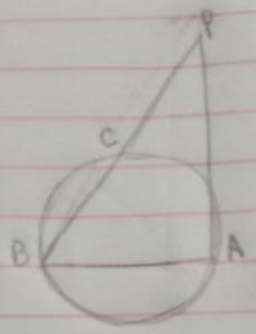
$64 = 2x^2$

$\frac{64}{2} = x^2$

$x^2 = 32$

$x = \sqrt{32}$

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



02 $PA = 3PC$

$\frac{PB}{PA} = \frac{PA}{PC}$

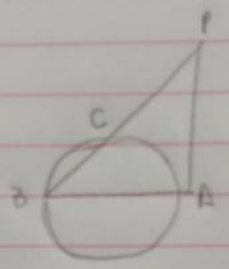
$PA^2 = PB \cdot PC$

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

$9PC^2 = PB \cdot PC$

$9PC = PB$

$PB = 9PC$ //



03 $x^2 + 5x + (2,5)^2 = (2,5)^3 + 36$

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

$\Delta = 25 + 144 = 169$

$x' = \frac{-5 + 13}{2} = \frac{8}{2} = 4$ //

$x'' = \frac{-5 - 23}{2}$ $\emptyset$

04 $AE \cdot EB = 3$

$CE = ED$

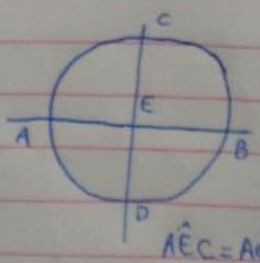
$CE \cdot ED = AE \cdot EB = 3$

$CE^2 = 3$

$CE = \sqrt{3}$

$CD = CE + ED \rightarrow CD = CE + CE$

$CD = 2 \cdot CE \rightarrow CD = 2\sqrt{3}$



$A\hat{E}C = A\hat{E}D = B\hat{E}C = B\hat{E}D = 90°$

(05) $4.(4+2R) = 18.8$

$16 + 8R = 144$

$8R = 128$

$R = 16$

Perímetro de AOC

AC CO OA

$18 + 16 + 20 = 54$