Sabrina Medeiros de Lima - CT II 317

Potência de um ponto

01- $AB^2 = AC \cdot AD$

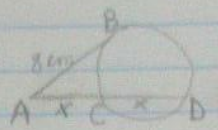
$8^2 = x \cdot 2x$

$64 = 2x^2$

$\frac{64}{2} = 32 = x^2$

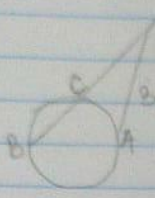
$x = \sqrt{32} \rightarrow 4\sqrt{2}$

32	2
16	2
8	2
4	2
2	2
1	



R. E

02-



$PA^2 = PC \cdot PB$

$3PC^2 = PC \cdot PB$

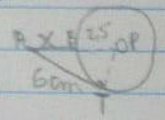
$\frac{9PC}{PC} = PB$

$PB = 9PC$

$PA = 3PC$

R. B

03-



$AT^2 = AB \cdot AP$

$6^2 = x \cdot x \cdot 2,5$

$36 = x^2 \cdot 2,5$

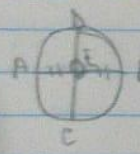
$0 = -36 + x^2 + 5$

$\frac{4 + -9}{4 \cdot -9} = \frac{-5}{-36}$

$x = 4$ ou $x = -9$ (não convém)

R E

04- $AE \cdot EB = 3$



$AE \cdot EB = \overbrace{CE \cdot DE}^{3}$

$CE^2 = 3$

$CE = \sqrt{3}$

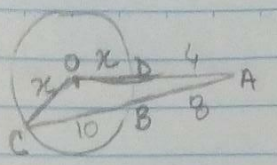
$CD = CE + ED$

$CD = 2 \cdot CE$

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

R. B

05-



$AO \cdot AD = AC \cdot AB$

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

$16 + 8x = 144$

$x = \frac{144-16}{8} \rightarrow \frac{128}{8} \rightarrow 16$

$P = 18 + 16 + 20 = 54$

R. E