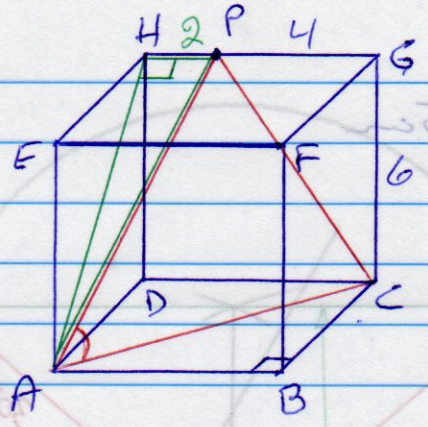
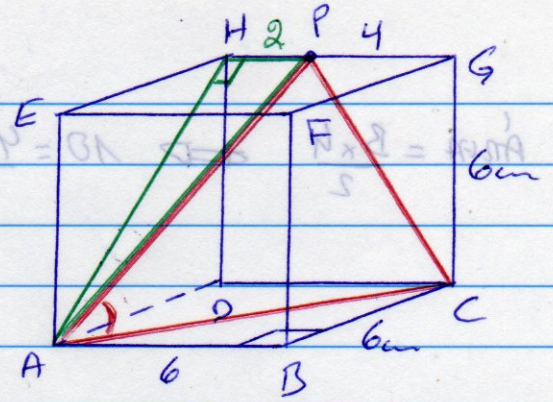
1)





$\overline{AC} = \overline{AH}$ = DIAGONAL DE CARA

$\overline{AC} = \sqrt{6^2+6^2} = \sqrt{72} \approx 8{,}49\text{cm}$

CÁLCULO DE $\overline{AP}$

$\overline{AP}^2 = \overline{AH}^2 + \overline{HP}^2$

$\overline{AP}^2 = (\sqrt{72})^2 + 2^2$

$\overline{AP}^2 = 72 + 4$

$AP = \sqrt{76} \approx 8{,}72\text{cm}$

CÁLCULO DE $\overline{PC}$:

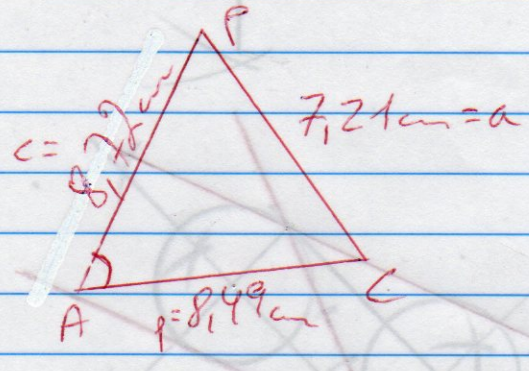
$\overline{PC}^2 = \overline{PG}^2 + \overline{GC}^2$

$\overline{PC}^2 = 4^2 + 6^2$

$\overline{PC} = \sqrt{16+36}$

$\overline{PC} = \sqrt{52} \approx 7{,}21$

CÁLCULO DE $\hat{PAC}$



"TEOREMA DEL COSENO"

$a^2 = p^2 + c^2 - 2pc\cos\hat{A}$

$2pc\cos\hat{A} = p^2 + c^2 - a^2$

$\cos\hat{A} = \dfrac{p^2+c^2-a^2}{2pc}$

$\cos\hat{A} = \dfrac{8{,}49^2 + 8{,}72^2 - 7{,}21^2}{2 \times 8{,}49 \times 8{,}72}$

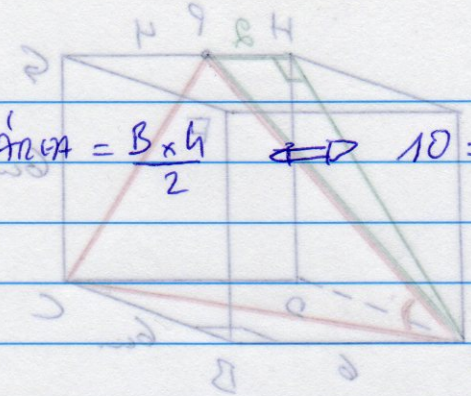
$\cos\hat{A} = \dfrac{72+76-52}{2 \times 8{,}49 \times 8{,}72}$

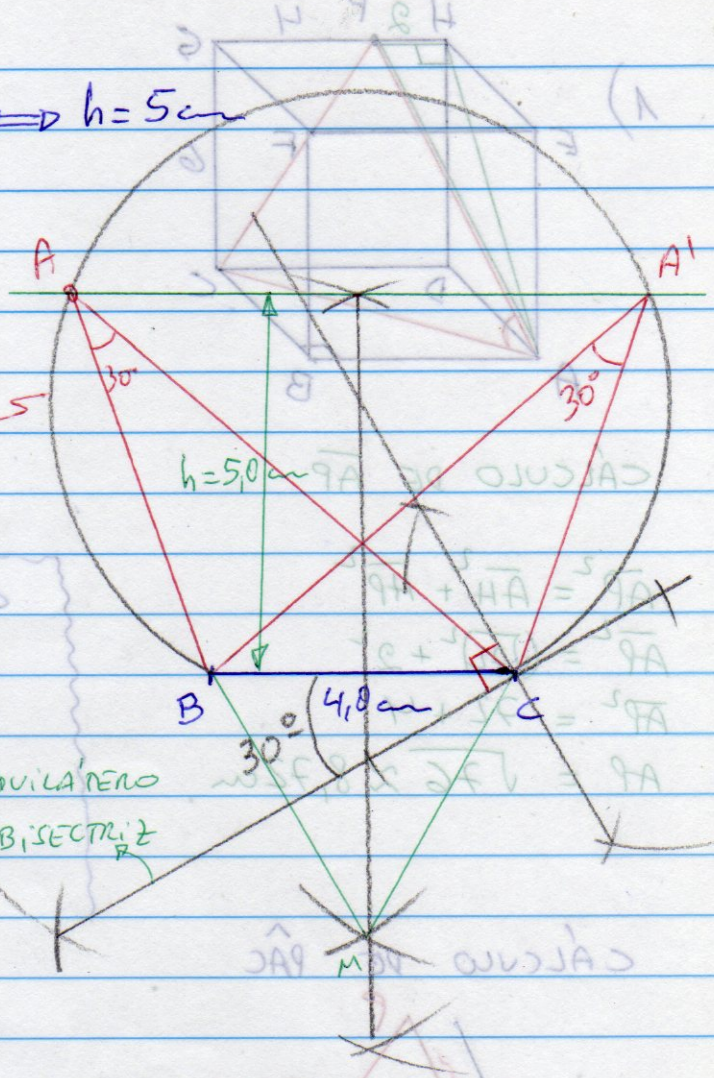
$\cos\hat{A} = 0{,}648361266$

$\hat{A} = 49{,}58183793$

$\hat{A} = 49°35'$

2) $\text{ÁREA} = \frac{B \times h}{2} \iff 10 = \frac{4 \times h}{2} \iff h = 5\,cm$



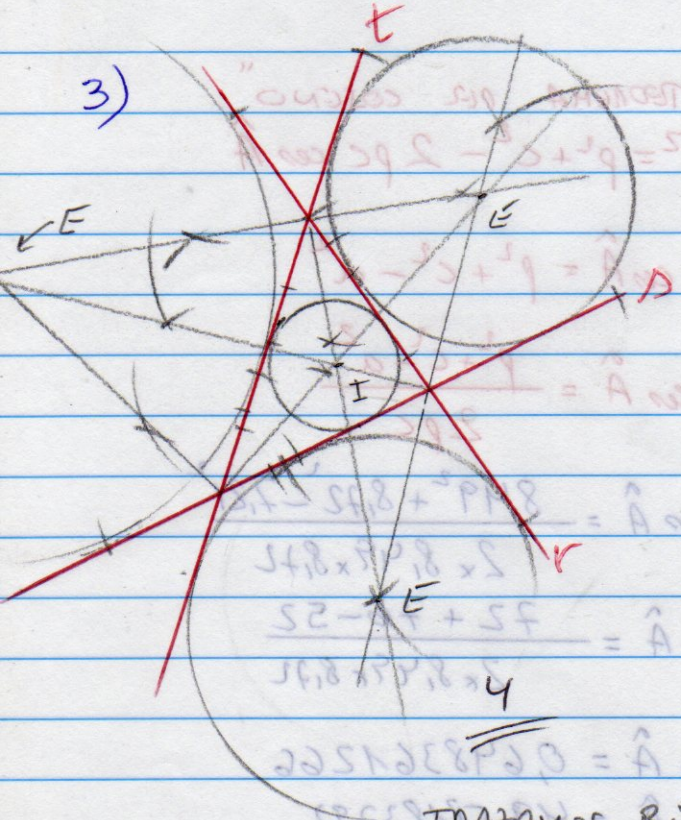


ARCO CAPAZ DE SEGMENTO $\overline{BC} = 4\,cm$ Y ÁNGULO $\alpha = 30°$

$\triangle BCP$ EQUILÁTERO

BISECTRIZ

3)

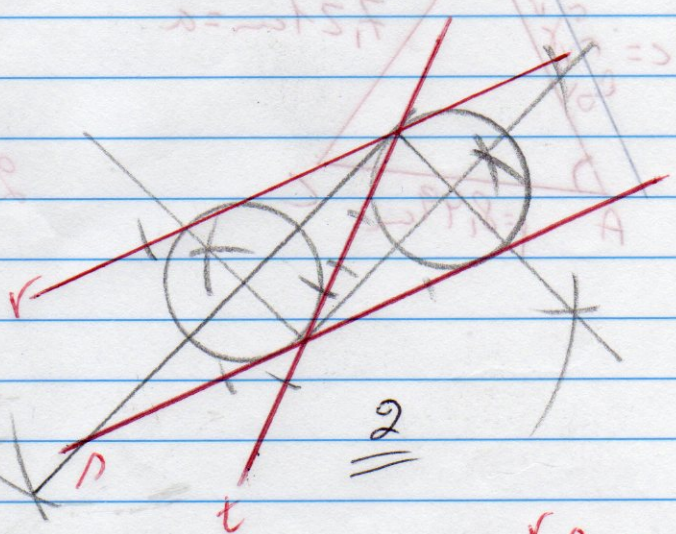


4

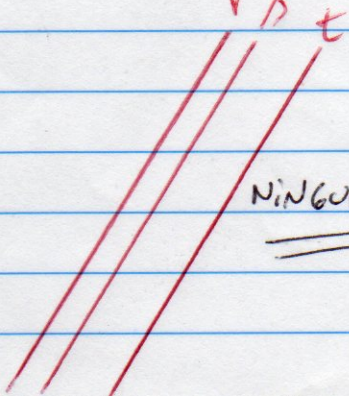
TRAZAMOS BISECTRICES

$\Rightarrow$ I = INCENTRO

E = EXINCENTRO



2



NINGUNA