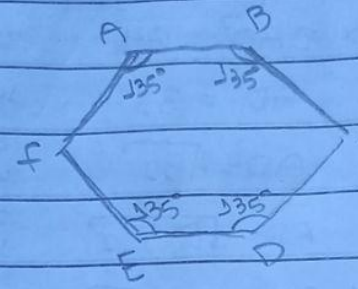
Aluno: **Leonardo Yukio Aoki** Turma: **CTII 348**
Prontuário: **CB1990233** *IFSP - Câmpus Cubatão*

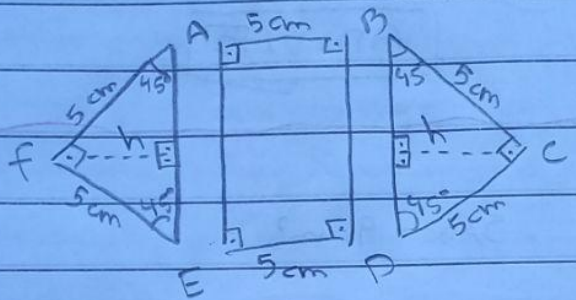
Tarefa Básica - Aula 1

1.



Soma ângulos internos $= (n-2) \cdot 180°$
$= (6-2) \cdot 180°$
$= 720°$

$A+B+D+E = 540°$
$f+C = 180°$



$AE^2 = 5^2 + 5^2$

$AE = \sqrt{50}$

$AE = \sqrt{2 \cdot 5^2}$

$\boxed{AE = 5\sqrt{2}}$

50	2 · 2
25	5 · 5
5	5
1	

$= 5^2$

$\text{Sen } 45° = \frac{h}{5}$

$S_{ABDE} = 5\sqrt{2} \cdot 5\sqrt{2}$

$\boxed{S_{ABDE} = 25\sqrt{2}\ cm^2}$

$\frac{\sqrt{2}}{2} = \frac{h}{5}$

$2h = 5\sqrt{2}$

$\boxed{h = \frac{5\sqrt{2}}{2}}$

$S_{AEf} = \frac{(5\sqrt{2}) \cdot \left(\frac{5\sqrt{2}}{2}\right)}{2}$

$S_{AEf} = \frac{\frac{25\sqrt{4}}{2}}{2}$

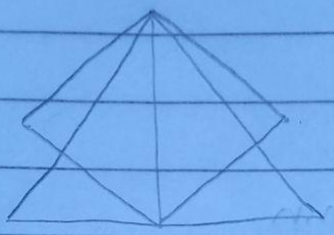
$S_{AEf} = \frac{50/2}{2}$

$\boxed{S_{AEf} = \frac{25}{2}\ cm^2}$

$S_{ABCDEf} = 25\sqrt{2} + 2 \cdot (25/2)$
$= 25\sqrt{2} + 25$
$= \boxed{25(\sqrt{2}+1)\ cm^2}$

E

2.



$S_\Delta = 16\sqrt{3}\ m^2$

$S_\Delta = \frac{\ell^2 \cdot \sqrt{3}}{4}$

$16\sqrt{3} = \frac{\ell^2\sqrt{3}}{4}$

$64\sqrt{3} = \ell^2\sqrt{3}$

$\ell^2 = 64$

$\boxed{\ell_\Delta = 8\ m}$

$h = \frac{\ell\sqrt{3}}{2}$

$h = \frac{8\sqrt{3}}{2}$

$\boxed{h = 4\sqrt{3} = d}$

$d = \ell\sqrt{2}$

$4\sqrt{3} = \ell\sqrt{2}$

$\ell = \frac{4\sqrt{3}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$

$\ell = \frac{4\sqrt{6}}{2}$

$\boxed{\ell_\square = 2\sqrt{6}}$

$S_\square = \ell^2$

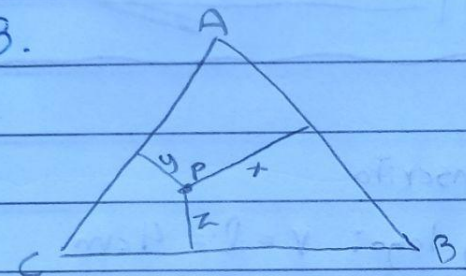
$S_\square = (2\sqrt{6})^2$

$S_\square = 4.6$

$\boxed{S_\square = 24\ m^2}$

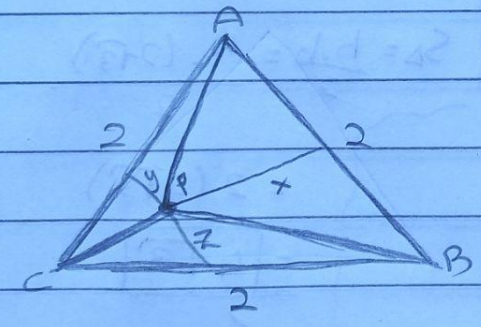
B

3.



$S_{APB} + S_{BPC} + S_{APC} = S_{ABC} = \sqrt{3}$

$S_{APB} = \frac{2 \cdot x}{2}$ $S_{BPC} = \frac{2 \cdot z}{2}$ $S_{APC} = \frac{2 \cdot y}{2}$

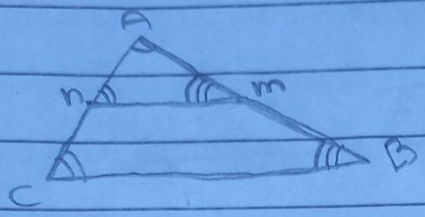


$\frac{2x}{2} + \frac{2z}{2} + \frac{2y}{2} = \sqrt{3}$

$\boxed{x + z + y = \sqrt{3}}$

B

4.



$S_{ABC} = 96\ m^2$

$mn = \frac{1}{2} BC$

$\triangle ABC \sim \triangle Amn$

$\frac{S_{Amn}}{S_{ABC}} = \frac{1}{4}$

$S_{Amn} = \frac{1}{4} ABC$

$\boxed{S_{Amn} = \frac{1}{4} \cdot 96\ m^2}$

$S_{BmnC} = S_{ABC} - S_{Amn}$

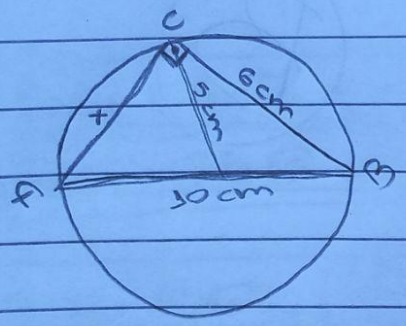
$S_{BmnC} = 96 - \frac{1}{4} \cdot 96$

$S_{BmnC} = 96 - 24$

$\boxed{S_{BmnC} = 72\ m^2}$

$72\ m^2$

5.



$10^2 = 6^2 + x^2$

$100 = 36 + x^2$

$x^2 = 64$

$\boxed{x = 8\ cm}$

$S_{ABC} = \frac{b.h}{2}$

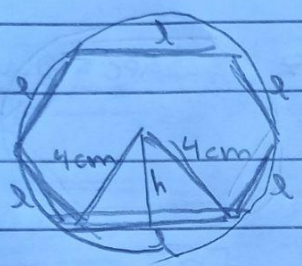
$S_{ABC} = \frac{8.6}{2}$

$S_{ABC} = 4.6$

$\boxed{S_{ABC} = 24\ cm^2}$

A

6.



Hexágono regular inscrito na circunferência, logo: $r = l = 4cm$

$a_p = \frac{r\sqrt{3}}{2}$

$a_p = \frac{4\sqrt{3}}{2} = \boxed{2\sqrt{3}}$

$S_\Delta = \frac{b.h}{2} = \frac{4.(2\sqrt{3})}{2}$

$= 2(2\sqrt{3})$

$= \boxed{4\sqrt{3}}$

Quadrado:

$(4\sqrt{3})^2 = 16.3$

$\boxed{48}$