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

Tarefa Básica - Aula 9

1.

400 peças

área = $36\,m^2$

peça quadrada

a) $\frac{36}{400} = \boxed{0{,}09\,m^2}$

b) $0{,}09 = l^2$

$l = \sqrt{0{,}09} = 0{,}3$

$2p = 0{,}3 \cdot 4 = \boxed{1{,}2\,m}$

2.

- $S = x^2$
- $2S = y^2$

$\Rightarrow S = \frac{y^2}{2}$

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

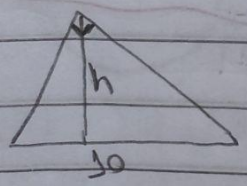
$2x^2 = y^2$

$y = \sqrt{2x^2}$

$\Rightarrow y = \sqrt{2}\,x$

D

3.



$15 = \frac{10 \cdot h}{2}$

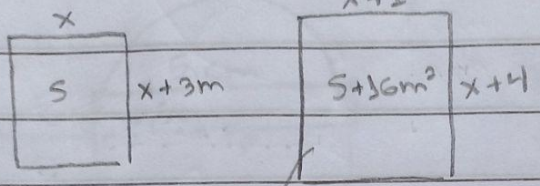
$10h = 30$

$h = 30/10$

$\boxed{h = 3}$

D

4.



$S = x \cdot (x+3)$

$S = x^2 + 3x$

$S + 36 = (x+1) \cdot (x+4)$

$S + 36 = x^2 + 4x + x + 4$

$S = x^2 + 5x - 12$

$x^2 + 3x = x^2 + 5x - 12$

$3x = 5x - 12$

$-2x = -12$

$\boxed{x = 6}$

$S = 6^2 + 3 \cdot 6$

$S = 36 + 18$

$\boxed{S = 54}$

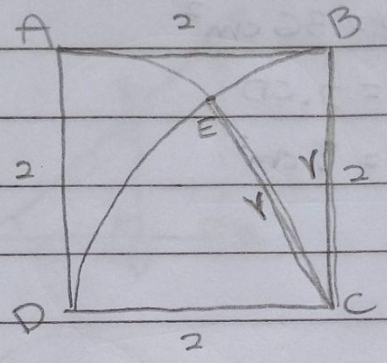
$S + 16$

$54 + 16$

$\boxed{70\,m^2}$

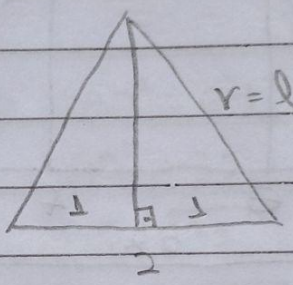
$70\,m^2$

5.



$l = 2$

$r = 2$



$A = \frac{b \cdot h}{2} \rightarrow \frac{2 \cdot \sqrt{3}}{2}$

$\sqrt{3}$

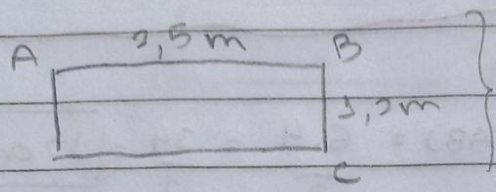
$2^2 = 1^2 + h^2$

$h^2 = 4 - 1$

$h = \sqrt{3}$

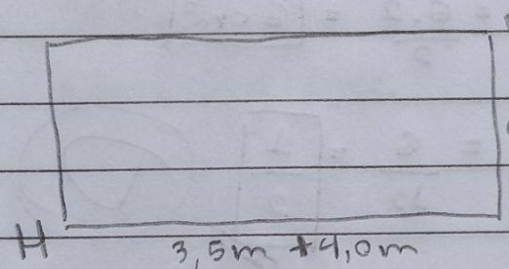
B

6.



$A = b \cdot h$

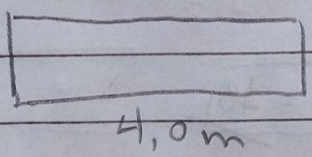
$2,5 \cdot 1,2 = 3\ m^2$



$A = b \cdot h$

$(3,5 + 4) \cdot (6 - 1,2)$

$7,5 \cdot 4,8 = 36\ m^2$



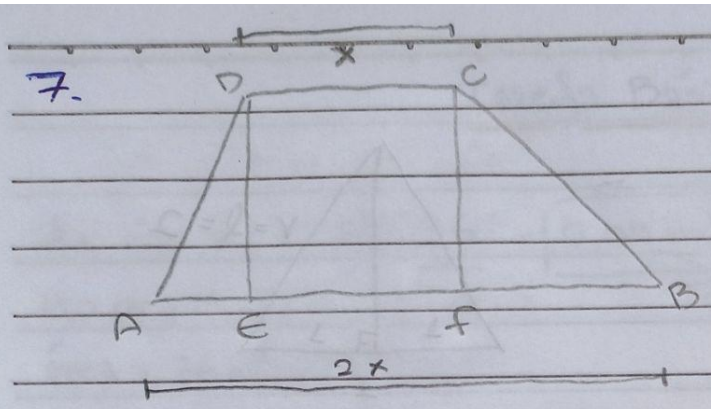
$A = b \cdot h$

$4 \cdot 0,8 = 3,2\ m^2$

Área total = $3 + 36 + 3,2 = 42,2\ m^2$

E

7.



$S_{ABCD} = 36\ cm^2$

$AB = 2.CD$

$CDEF = ?\ cm^2$

$S_{ABCD} = \frac{(B+b).h}{2}$

$36 = \frac{(2x+x).h}{2}$

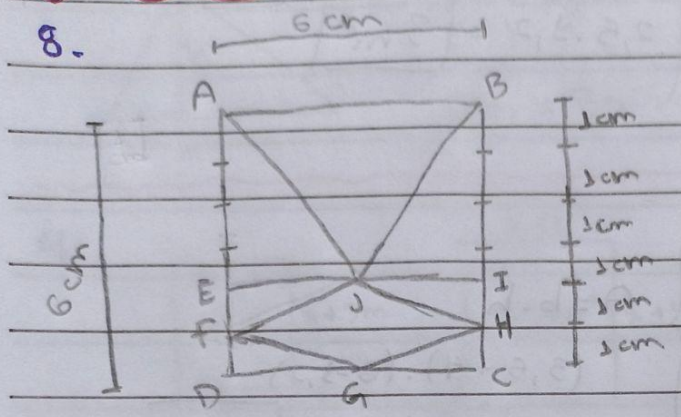
$72 = 3x.h$

$x.h = 24$

$x.h = S_{CDEF} = \boxed{24\ cm^2}$

E

8.



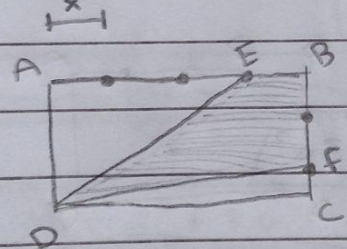
$S_{ABJ} = \frac{6.4}{2} = \frac{24}{2} = \boxed{12\ cm^2}$

$S_{FGHI} = \frac{6.2}{2} = \boxed{6\ cm^2}$

$\frac{S_{FGHI}}{S_{ABJ}} = \frac{6}{12} = \boxed{\frac{1}{2}}$

D

9.



$S_{ABCD} = 4x.3x$

$48 = 12x^2$

$x^2 = 4$

$\boxed{x = 2}$

$S_{ADE} = \frac{(2.3).(2.3)}{2}$

$\boxed{S_{ADE} = 18}$

$S_{CDF} = \frac{(2.4).2}{2}$

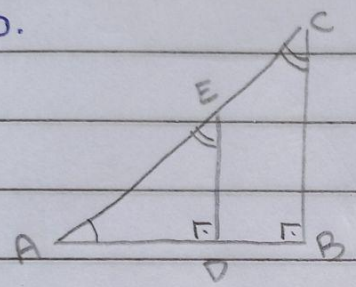
$\boxed{S_{CDF} = 8}$

$S_{BEFD} = 48 - 18 - 8$

$\boxed{S_{BEFD} = 22}$

E

10.



$\triangle ADE \sim \triangle ABC$

$\left(\frac{AD}{AB}\right)^2 = \frac{S_{ADE}}{S_{ABC}}$

$\left(\frac{AD}{8}\right)^2 = \frac{\frac{1}{2}S_{ABC}}{S_{ABC}}$

$\frac{AD^2}{64} = \frac{1}{2}$

$2AD^2 = 64$

$AD^2 = 32$

$AD = \sqrt{32}$

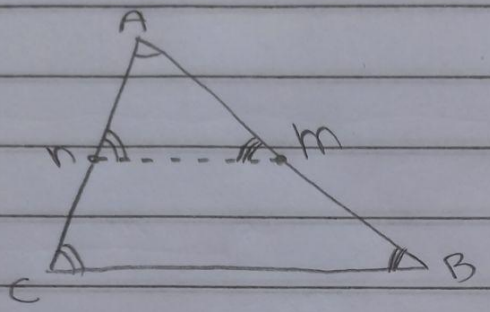
$AD = \sqrt{2^2 \cdot 2^2 \cdot 2}$

$AD = 2 \cdot 2\sqrt{2}$

$AD = 4\sqrt{2}$

32	2
16	2
8	2
4	2
2	2
1	

11.



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

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

$\triangle Amn \sim \triangle ABC$

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

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

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

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

$S_{Bmnc} = 96 - 24$

$S_{Bmnc} = 72\ m^2$

72 m²