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

Tarefa Básica - Aula 5

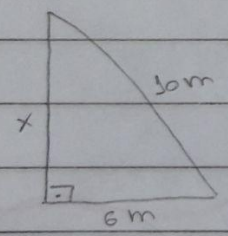
1. $x^2 = (\sqrt{3})^2 + (\sqrt{4})^2$

$x^2 = 3 + 4$

$\boxed{x = \sqrt{7}}$

B

2.



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

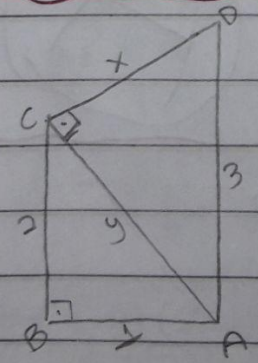
$100 = x^2 + 36$

$x^2 = 64$

$x = \sqrt{64} = \boxed{8}$

8m

3.



$y^2 = 1^2 + 2^2$

$\boxed{y^2 = 5}$

$3^2 = y^2 + x^2$

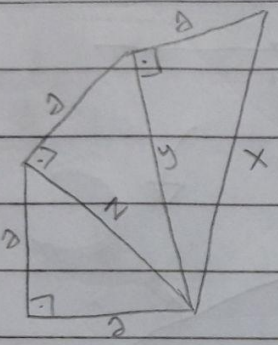
$9 = 5 + x^2$

$x^2 = 4$

$x = \sqrt{4} = \boxed{2}$

B

4.



$z^2 = a^2 + a^2$

$\boxed{z^2 = 2a^2}$

$y^2 = z^2 + a^2$

$\boxed{y^2 = 3a^2}$

$x^2 = y^2 + a^2$

$x^2 = 4a^2$

$x = \sqrt{4 \cdot a^2}$

$\boxed{x = 2a}$

B

5. $6^2 = 2^2 + x^2$

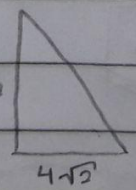
$x^2 = 32$

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

$x = 4\sqrt{2}$

32	2
16	2
8	2
4	2
2	2
1	

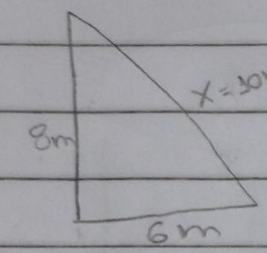
Área:



$\frac{(4\sqrt{2}) \cdot 2}{2} \Rightarrow \boxed{4\sqrt{2}}$

C

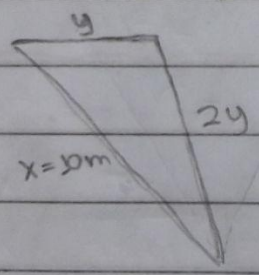
6.



$x^2 = 8^2 + 6^2$

$x^2 = 100$

$x = 10$



$10^2 = (2y)^2 + y^2$

$100 = 4y^2 + y^2$

$5y^2 = 100$

$y = \sqrt{20}$

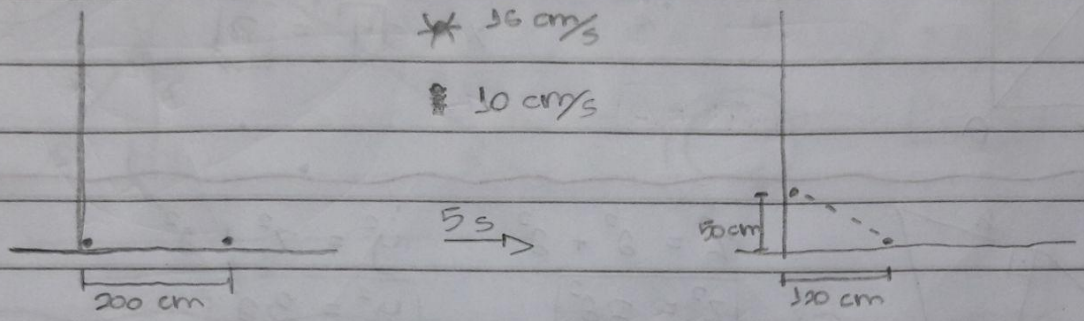
$y = \sqrt{2^2 \cdot 5}$

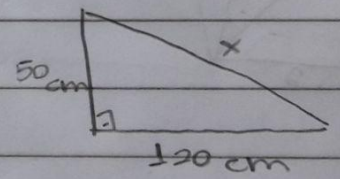
$y = \boxed{2\sqrt{5}}$

20	2
10	2
5	5
1	

A

7.





$x^2 = 120^2 + 50^2$

$x^2 = 14400 + 2500$

$x = \sqrt{16900}$

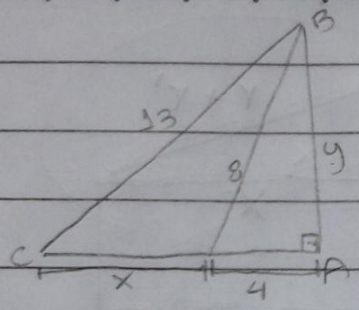
$\boxed{x = 130 \text{ cm}}$

$\div 100$

$\boxed{1,3 \text{ m}}$

B

8.



$8^2 = y^2 + 4^2$

$64 = y^2 + 16$

$\boxed{y^2 = 48}$

$13^2 = y^2 + (x+4)^2$

$169 = 48 + x^2 + 16 + 8x$

$x^2 + 8x - 105 = 0$

$7 + -15 = -8$

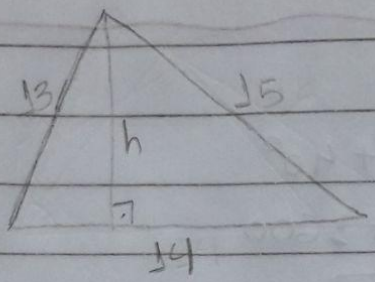
$7 \cdot -15 = -105$

$\boxed{x' = 7}$

$x'' = -15$

$\boxed{7\ m}$

9.



Fórmula de Heron

$p = \frac{(13+14+15)}{2} = \frac{42}{2} = 21$

$A = \sqrt{21(21-13)(21-14)(21-15)}$

$A = \sqrt{21 \cdot 8 \cdot 7 \cdot 6}$

$A = \sqrt{7056}$

$\boxed{A = 84}$

$A = \frac{b \cdot h}{2}$

$84 = \frac{14 \cdot h}{2}$

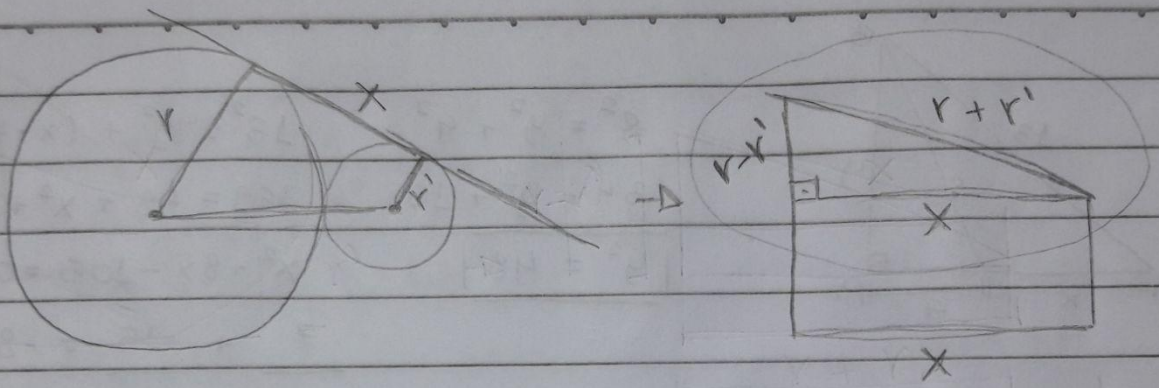
$84 = 7h$

$h = 84/7$

$\boxed{h = 12}$

$h = 12$

10.



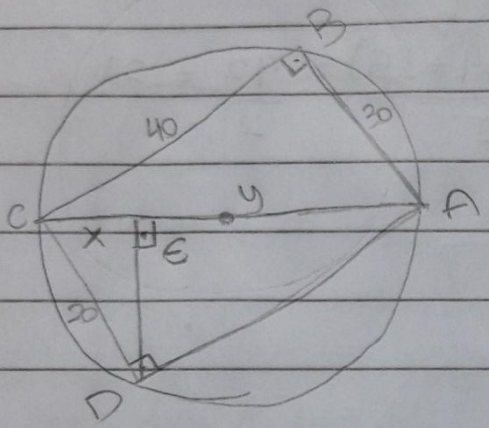
$(r+r')^2 = (r-r')^2 + x^2$

$x^2 = (r^2 + 2rr' + r'^2) - (r^2 - 2rr' + r'^2)$

$x^2 = 4rr'$

$x = \sqrt{4rr'} = \boxed{2\sqrt{rr'}}$

11.

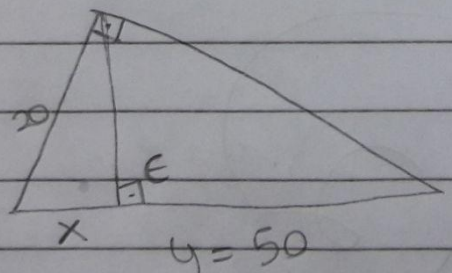


$y^2 = 30^2 + 40^2$

$y^2 = 900 + 1600$

$y = \sqrt{2500}$

$\boxed{y = 50}$



$c^2 = a \cdot m$

$20^2 = 50 \cdot x$

$50x = 400$

$x = 400/50$

$\boxed{x = 8}$