Tarefa Básica

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

$x^2 = 3 + 4$

$x^2 = \sqrt{7}$

alternativa (B)

2)

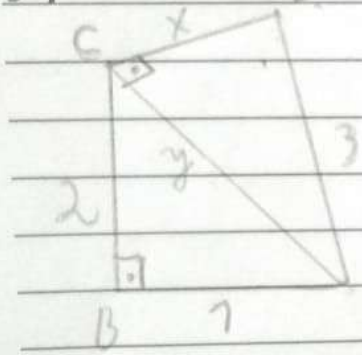
$10^2 = x^2 + 6^2$

$100 = x^2 + 36$

$x^2 = 64$

$x = \sqrt{64} \Rightarrow x = 8\,m$

3)



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

$y = \sqrt{5}$

$3^2 = (\sqrt{5})^2 + x^2$

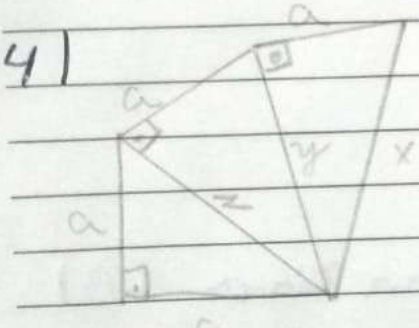
$9 = 5 + x^2$

$x = \sqrt{4} =$

$x = 2$

alternativa (B)

4)



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

$z^2 = 2a^2$

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

$y^2 = 3a^2$

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

$x^2 = 4a^2$

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

$x = 2a$

alternativa (B)

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

$36 = 4 + x^2$

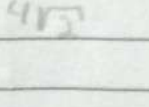
$x = \sqrt{32}$

$x = \sqrt{2} \cdot 2^2 \cdot 2^1$

$x = 4\sqrt{2}$

32	2
16	2
8	2
4	2
2	2
1	

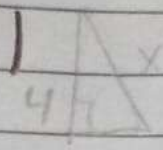
Área:



$4\sqrt{2}$

alternativa (C)

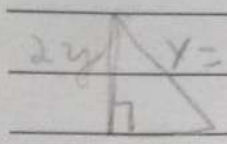
CREATE !!.

6) 

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

$x^2 = 100$

$x = \sqrt{100} \Rightarrow x = 10$ m



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

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

$5y^2 = 100$

$y = \sqrt{20}$

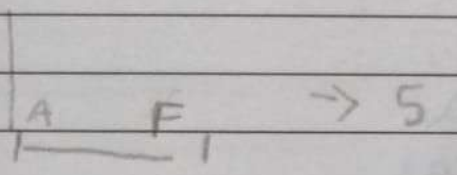
$y = \sqrt{2 \cdot 5}$

$y = 2\sqrt{5}$ alternativa (A)

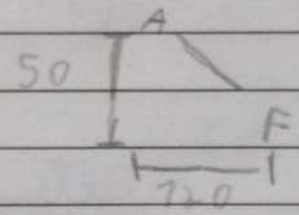
20	2
10	2
5	5
1	

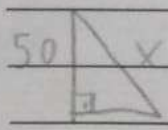
7) avanço = 16 cm/s

formiga = 10 cm/s



$\rightarrow$ 5 s





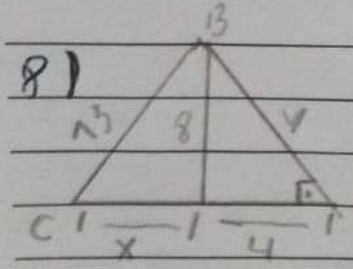
$x^2 = 50^2 + 720^2$

$x^2 = 2500 + 14400$

$x = \sqrt{16900}$

$x = 130$ cm $\rightarrow$ 100

$x = 1{,}3$ m alternativa (B)

8) 

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

$64 = 16 + y^2$

$y^2 = 48$

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

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

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

$x = 7$ m $\quad x' = 7 \quad x'' = -15$

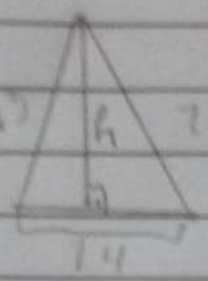
$7 + (-15) = -8$

$7 \cdot (-15) = -105$

alternativa (D)

CREATE IT.

9)



Fórmula de Heron

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

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

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

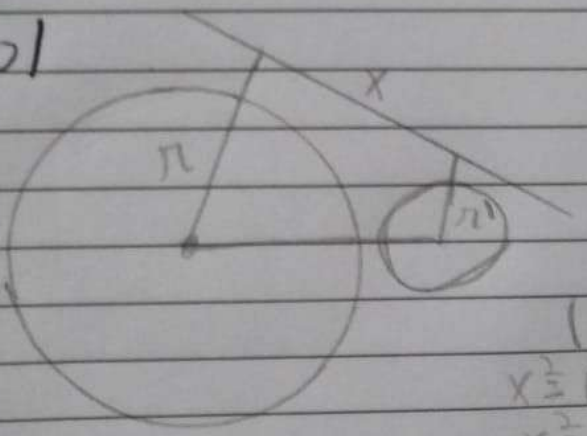
$$A = \sqrt{7056}$$

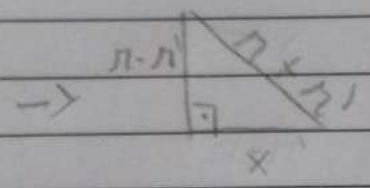
$$A = 84$$

$$84 = 7h$$

$$h = \frac{84}{7} \Rightarrow h = 12$$

10)





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

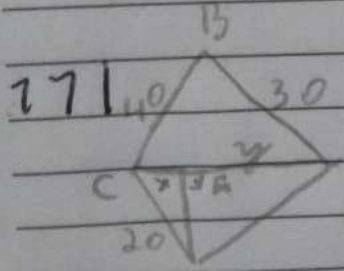
$$x^2 = (R^2 + 2Rr + r^2) - (R^2 - 2Rr + r^2)$$

$$x^2 = 4Rr$$

$$x = \sqrt{4Rr}$$

$$x = 2\sqrt{Rr}$$

11)

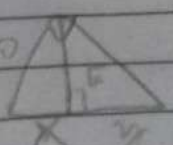


$$y^2 = 30^2 + 40^2$$

$$y^2 = 900 + 1600$$

$$y = \sqrt{2500}$$

$$y = 50$$



$$c^2 = a \cdot m$$

$$20^2 = 50 \cdot x$$

$$50x = 400$$

$$x = \frac{400}{50}$$

$$x = 8$$

alternativa (C)