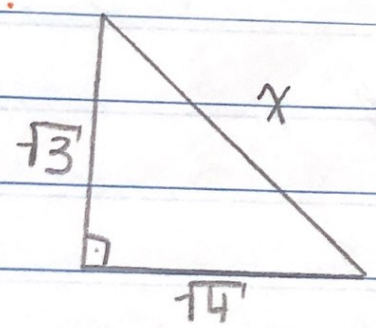
Triângulo retângulo

tarefa básica!

01.

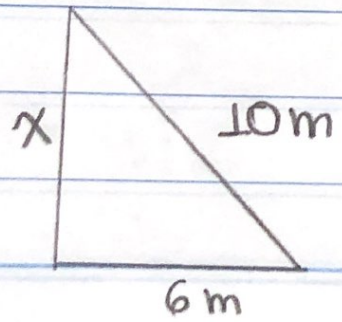


$x^2 = (\sqrt{3})^2 + (\sqrt{4})^2$

$x^2 = 3 + 4$

$x = \sqrt{7}$

02.



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

$x^2 = 100 - 36$

$x^2 = 64 \quad x = 8\,m$

03. triân. 1 → $y^2 = 1 + 2^2$

$y^2 = 5$

triân. 2 → $3^2 = x^2 + y^2$

$9 = x^2 + 5$

$9 - 5 = x^2$

$x^2 = 4$

$x = 2$ // letra b //

04. $\Delta 1 \rightarrow y^2 = a^2 + a^2$

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

$\Delta 2 \rightarrow z^2 = a^2 + y^2$

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

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

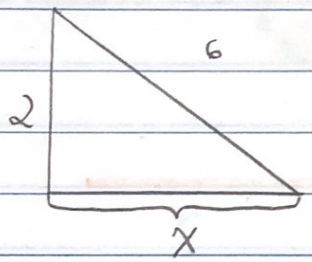
$\Delta 3 \rightarrow x^2 = a^2 + z^2$

$x^2 = a^2 + 3a^2$

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

$x = 2a$ // letra b //

05.



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

$36 = 4 + x^2$

$x^2 = 32$

$x = 4\sqrt{2}$

$\text{Área} = \frac{b \cdot h}{2} \Rightarrow \frac{4\sqrt{2} \cdot 2}{2}$

$= 4\sqrt{2}$ // letra c //

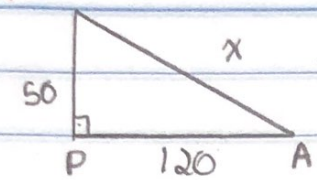
06. $a^2 + (2a)^2 = 10^2$

$5a^2 = 100$

$a^2 = \frac{100}{5}$

$a = 2\sqrt{5}$ // letra a //

07. F



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

$x^2 = 16.900$

$x = 130\,cm \rightarrow 1,3\,m$ //

~~letra~~

08. $\Delta 1 \rightarrow 8^2 = y^2 + 4^2$

$y^2 = 64 - 16$

$\boxed{y^2 = 48}$

$\Delta 2 \rightarrow x^2 + 8x + 16 + 48 = 169$

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

d //

$x_1 = 7$ // e ~~$x_2 = -15$~~

09. triân ⊥ $\rightarrow x^2 + h_{\Delta 1}^2 = 13^2$

?

$\boxed{h_{\Delta 1}^2 = 169 - x^2}$

triân. 2 $\rightarrow \boxed{h_{\Delta 2}^2 = -x^2 + 28x + 29}$

$h_{\Delta 1}^2 = h_{\Delta 2}^2$

$x = 5$

$y^2 = 169 - x^2$

$y^2 = 169 - 25$

$y^2 = 144$ $\Rightarrow h = 12$ //

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

?

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

$x^2 = 4 \cdot r r'$

$x = 2 \cdot \sqrt{r r'}$ //

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

$\boxed{y = 50}$

$z^2 = 20^2 - 50^2$

$\boxed{z = 10\sqrt{21}}$

$\ell = 11\sqrt{\ }$ $\rightarrow x^2 - 11m - 32$