Tarefa básica

1.

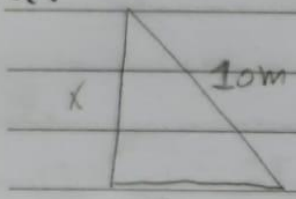
$h^2 = (\sqrt{3})^2 + (\sqrt{4})^2$

$h^2 = 3 + 4$

$h^2 = 7$

$h = \sqrt{7}$ (B)

2.



$a^2 = b^2 + c^2$

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

$100 = 36 + x^2$

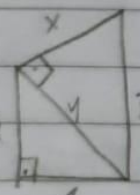
$100 - 36 = x^2$

$64 = x^2$

$\sqrt{64} = x$

$x = 8m$

3.



$y^2 = 2^2 + 1^2$ | $x^2 = 3^2 + (\sqrt{5})^2$

$y^2 = 4 + 1$ | $x^2 = 9 + 5$

$y^2 = 5$ | $x^2 = 14$

$y = \sqrt{5}$ | $x = \sqrt{14}$

$x = 2$ (B)

4.

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

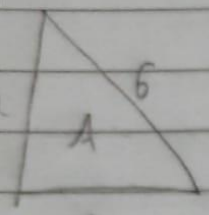
$x^2 = 2a + 2a$

$x^2 = 4a$

$x = \sqrt{4a}$

$x = 2a$ (B)

5.



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

$36 - 4 = x^2$

$32 = x^2$

$\sqrt{32} = x$

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

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

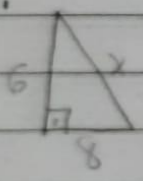
$x = 4\sqrt{2}$

$A = \frac{2 \cdot 4\sqrt{2}}{2}$

$A = \frac{8\sqrt{2}}{2}$

$A = 4\sqrt{2}$ (C)

6.

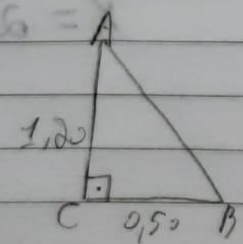


7.

5. $16\,cm = 80 = 0,80\,m$

$A = 2,00 - 0,80 = 1,20\,m$

$B = 5 \cdot 10 = 50\,cm = 0,50\,m$



$AB^2 = AC^2 + BC^2$

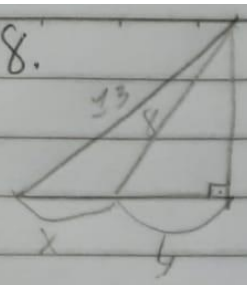
$AB^2 = 1,20^2 + 0,50^2$

$AB^2 = 1,44 + 0,25$

$AB = \sqrt{1,69}$

$AB = 1,30\,m$ (B)

8.



$8^2 = x^2 + 4^2$

$x^2 = 48$

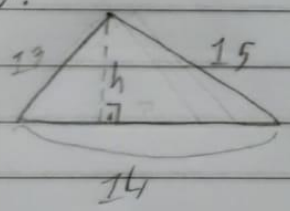
$48 + (x+4)^2 = 13^2$ $\quad \Delta = 64 + 420$

$x^2 + 8x + 16 + 48 = 169$ $\quad \Delta = 484$

$x = \frac{8 \pm 22}{2} \rightarrow x = 7$

$\rightarrow x = -15$ x $\quad x = 7m$ (D)

9.



$13 \cdot 15 = 14 \cdot h$ $\quad h = 12$

$195 = 14h$

$h = \frac{195}{14}$

10.

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

$x^2 = (n^2 + 2nn' + n'^2) - (n^2 - 2nn' + n'^2)$

$x^2 = 4nn' \rightarrow x = 2\sqrt{nn'}$

11.

$a = AC = ?$

$b = BC = 40$

$c = AB = 30$

$(AC)^2 = (40)^2 + (30)^2$

$(AC)^2 = 1600 + 900$

$(AC)^2 = 2500$

$(AC) = \sqrt{2500}$

$(AC) = 50$

$(20)^2 = (50)n$

$400 = 50n$

$50n = 400$

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

$n = 8$ (C)