Tarefa Básica

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

$h^2 = 3 + 4$

$h^2 = 7$

$h = \sqrt{7}$ u

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

$x^2 + 36 = 100$

$x^2 = 100 - 36$

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

3. $(AC)^2 = 2^2 + 1^2$

$(AC)^2 = 4 + 1$

$AC = \sqrt{5}$ u

$(CD)^2 = 3^2 - (\sqrt{5})^2$

$(CD)^2 = 9 - 5$

$CD = \sqrt{4} = 2$ u

4. $y^2 = a^2 + a^2$

$y^2 = 2a^2$

$y = a\sqrt{2}$

$z^2 = a^2 + (a\sqrt{2})^2$

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

$z^2 = 3a^2$

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

$z = a\sqrt{3}$

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

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

$x^2 = 4a^2$

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

$x = 2a$

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

$36 = c^2 + 4$

$c^2 = 36 - 4$

$c = \sqrt{32}$

32	2
16	2
8	2
4	2
2	2
1	$4\sqrt{2}$ //

$A = b \cdot h / 2$ $A = 2 \cdot (4\sqrt{2}) / 2$

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

$A = 4\sqrt{2}$

6. $10^2 = x^2 + (2x)^2$

$100 = 5x^2$

$x = \sqrt{20}$

$x = 2\sqrt{5}$ //

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

$x^2 = 36 + 64$

$x^2 = 100$

$x = 10$ //

7. $AB^2 = 1{,}20^2 + 0{,}50^2$

$AB = 1{,}44 + 0{,}25$

$AB = \sqrt{1{,}69}$

$AB = 1{,}30\ m$ //

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

$x^2 = 64 - 16$

$x = \sqrt{48}$

$x = 2^2\sqrt{3}$

$x = 4\sqrt{3}$

$13^2 = (4+x)^2 + (4\sqrt{3})^2$

$169 = x^2 + 8x + 16 + 16 \cdot 3$

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

$\Delta = 64 - 4 \cdot 1 \cdot (-105)$

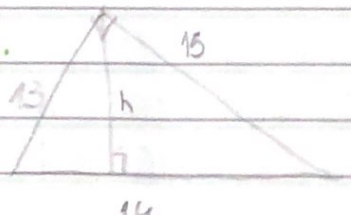
$\Delta = 484$

$x = \frac{-8 \pm 22}{2}$

$x^2 = \frac{-8+22}{2} = \frac{14}{2} = 7$ //

$x_1 = \frac{-8-22}{2} = -15$

9.



$15^2 = h^2 + n^2$

$13^2 = h^2 + m^2$

$m + n = 14$

$15^2 - 13^2 = n^2 - m^2$

$2 \cdot 28 = 14(m \cdot n)$

$n - m = 4$

$n = 9$

$15^2 = h^2 + g^2$

$h^2 = 24 \cdot 6$

$h = 12$ //

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

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

$x^2 = 4rr' = 2\sqrt{rr'}$ u

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

$AC^2 = 1600 + 900$

$AC = \sqrt{2500} = 50$ u

$20^2 = 50n$

$400 = 50n$

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

$n = 8$ u