Nome: Arthur Hernandes Silva de Souza **CTII 350**

Triângulo retângulo

Seg Ter Qua Qui Sex Sáb Dom

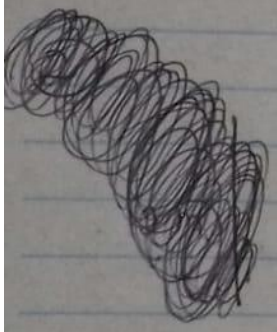
11

Triângulo Retângulo

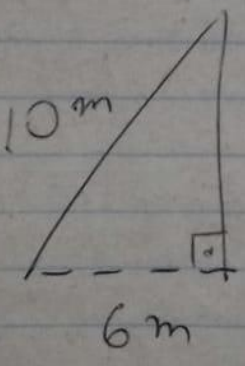
①

$$\sqrt{3}^2 + \sqrt{4}^2 = h^2$$
$$3 + 4 = h^2$$
$$7 = h^2$$
$$h = \sqrt{7}$$

Letra B

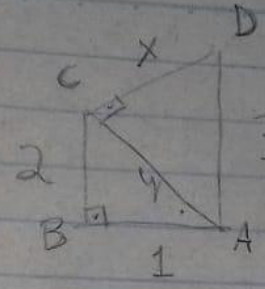


②



$$x^2 + 36 = 100$$
$$x^2 = 64$$
$$x = 8\,m$$

3.



$4 + 1 = y^2$

$y^2 = 5$

$y = \sqrt{5}$

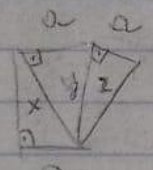
$9 - 5 = x^2$

$x^2 = 4$

$x = 2$

Letra B

4.



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

$x = a\sqrt{2}$

$y = a\sqrt{3}$

$z^2 = 4a^2$

$z = 2a$

Letra B

5.

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

$4 + x^2 = 36$

$x^2 = 32$

$x = \sqrt{32}$ $\quad x = 4\sqrt{2}$

$2(4\sqrt{2}) = 8\sqrt{2}$

$\frac{8\sqrt{2}}{2} = 4\sqrt{2}$

Letra C

6.

$36 + 64 = 100$

$\sqrt{100} = 10$

$x^2 + (2x)^2 = 100$

$x^2 + 4x^2 = 100$

$5x^2 = 100$

$x^2 = 20$

$x = \sqrt{20}$ $\quad x = 2\sqrt{5}$

Letra A

(7)

$5 \cdot 16 = 80$ cm

$200 - 80 = 120$ cm

$10 \cdot 5 = 50$ cm

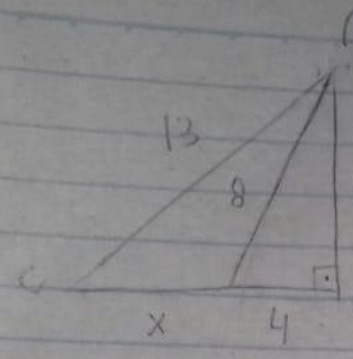
$120^2 + 50^2 = x^2$

$x^2 = 16900$

$x = 130$ cm $= 1,3$ m

Letra B

(8)



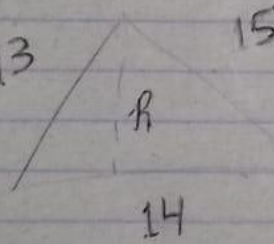
$y^2 = 8^2 - 4^2$
$y^2 = 48$
$y = \sqrt{48}$ $y = 2\sqrt{12}$

$AC^2 = 13^2 - (2\sqrt{12})^2$
$AC^2 = 169 - 48$
$AC^2 = 121$
$AC = 11$

$x = 11 - 4$
$x = 7m$

Letra D

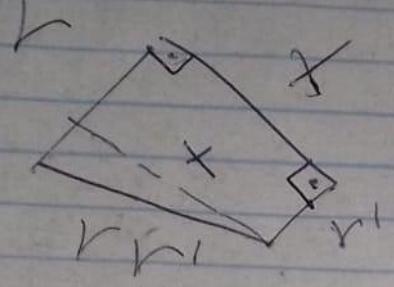
(9)



$h^2 = 225 - (14 - \sqrt{(169 - h^2)})^2$
$h^2 = 225 - (196 - 28\sqrt{(169 - h^2)} + (169 - h^2))$
$h^2 = 225 - (365 - 28\sqrt{169 - h^2} - h^2)$
$h^2 = -140 + 28\sqrt{169 - h^2} + h^2$
$0 = -140 + 28\sqrt{169 - h^2}$
$0 = -5 + \sqrt{169 - h^2}$
$25 = 169 - h^2$
$-144 = -h^2$
$h = 12, h = \cancel{-}12$

$h = 12$

10.



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

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

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

$x^2 = 4rr'$

$x = \sqrt{4rr'}$

$x = 2\sqrt{rr'}$

11.

$900 + 1600 = 2500$

$\sqrt{2500} = 50$

$\frac{50}{20} = \frac{20}{x}$

$50x = 400$

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

$x = 8$

1920 C