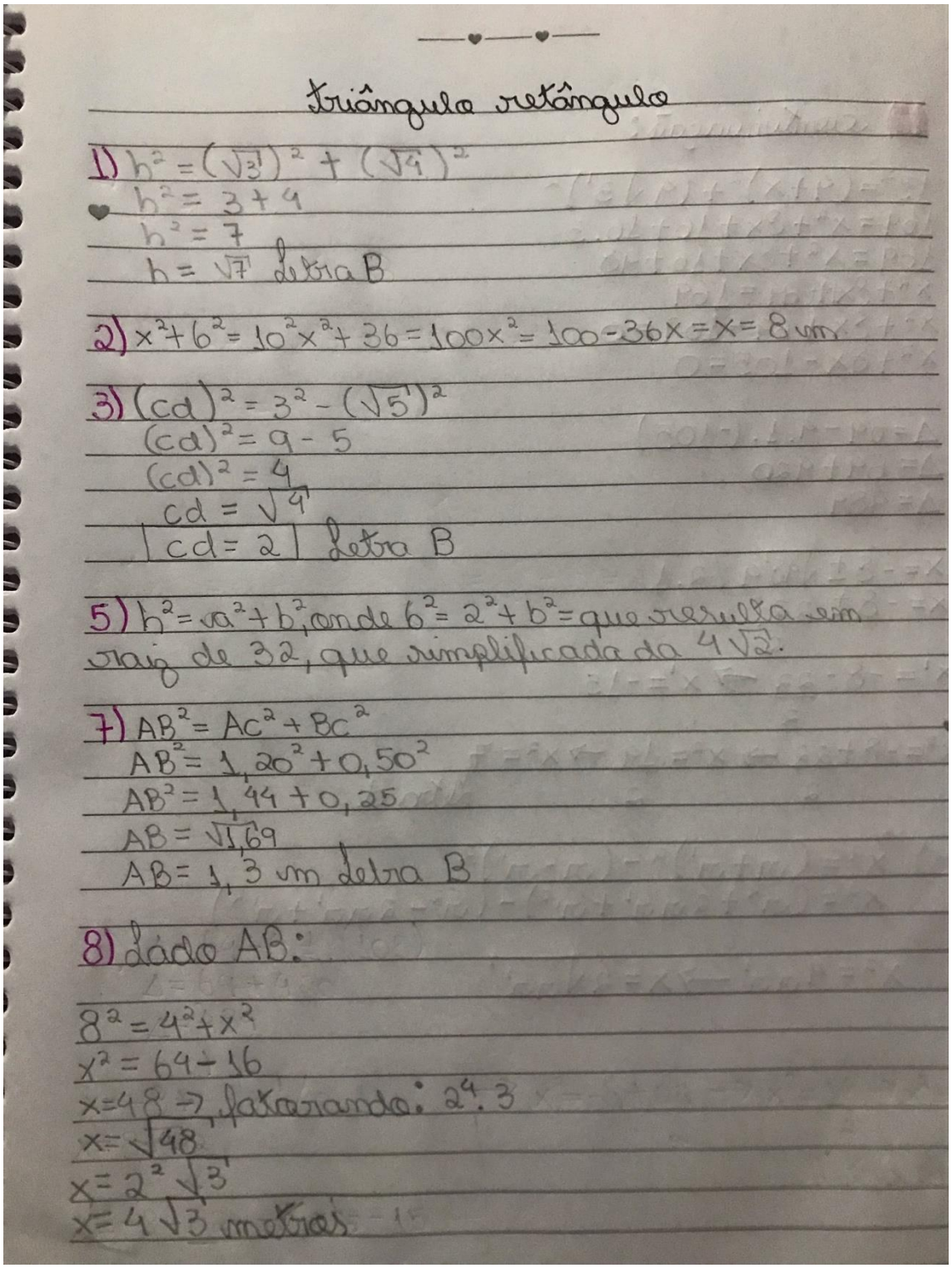
Beatriz Adolfo da Silva – CTII317



Triângulo retângulo

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

$h^2 = 3 + 4$

$h^2 = 7$

$h = \sqrt{7}$ letra B

2) $x^2 + 6^2 = 10^2 \quad x^2 + 36 = 100 \quad x^2 = 100 - 36 \quad x = x = 8$ m

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

$(cd)^2 = 9 - 5$

$(cd)^2 = 4$

$cd = \sqrt{4}$

$cd = 2$ letra B

5) $h^2 = a^2 + b^2$, onde $b^2 = 2^2 + b^2 =$ que resulta em raiz de 32, que simplificada da $4\sqrt{2}$.

7) $AB^2 = Ac^2 + Bc^2$

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

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

$AB = \sqrt{1,69}$

$AB = 1,3$ m letra B

8) Lado AB:

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

$x^2 = 64 - 16$

$x = 48 \rightarrow$ fatorando: $2^4 \cdot 3$

$x = \sqrt{48}$

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

$x = 4\sqrt{3}$ metros

Continuação:

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

$169 = x^2 + 8x + 16 + 16.3$

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

$x^2 + 8x + 64 = 169$

$x^2 + 8x + 64 - 169 = 0$

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

$\Delta = 64 - 4.1.(-105)$

$\Delta = 64 + 420$

$\Delta = 484$

$x = -8 \pm \sqrt{484} / 2.1$

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

$x' = -8 - \frac{22}{2} \rightarrow x' = -15$

$x'' = -8 + \frac{22}{2} \rightarrow x'' = \frac{14}{2} \rightarrow x'' = 7$

letra d

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

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

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