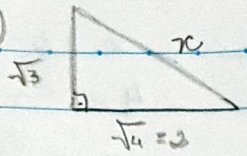
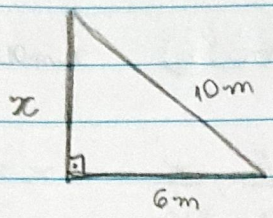
① 

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

$x^2 = 3 + 4$

$x = \sqrt{7}$

Alternativa (B)

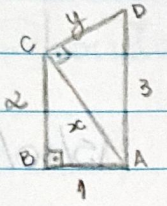
② 

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

$100 = 36 + x^2$

$x^2 = 64$

$x = 8\,m$

③ 

$x^2 = 1^2 + 2^2$

$x^2 = 1 + 4$

$x = \sqrt{5}$

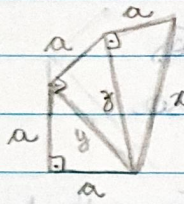
$3^2 = \sqrt{5}^2 + y^2$

$9 = 5 + y^2$

$y^2 = 4$

$y = 2$

Alternativa (B)

④ 

$y^2 = 2a^2$

$y = a\sqrt{2}$

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

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

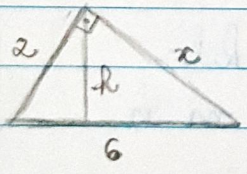
$z = a\sqrt{3}$

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

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

$x = 2a$

Alternativa (B)

⑤ 

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

$36 = 4 + x^2$

$x^2 = 32$

$x = 4\sqrt{2}$

$6h = 2 \cdot 4\sqrt{2}$

$6h = 8\sqrt{2}$

$h = \frac{8\sqrt{2}}{6} = \frac{4\sqrt{2}}{3}$

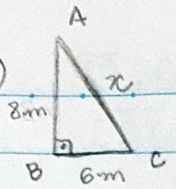
$A = 6 \cdot \frac{4\sqrt{2}}{3}$

$\frac{2}{}$

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

Alternativa (C)

⑥



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

$x^2 = 36 + 64$

$x = 10\,m$

$10^2 = y^2 + (2y)^2$

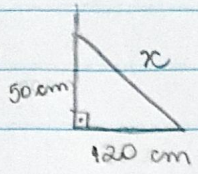
$100 = 5y^2$

$y^2 = 20$

$y = 2\sqrt{5}\,m$

Alternativa (A)

⑦



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

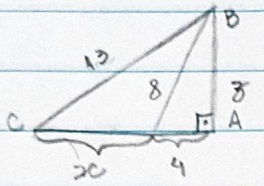
$x^2 = 2500 + 14400$

$x^2 = 16900$

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

Alternativa (B)

⑧



$8^2 = 4^2 + z^2$

$64 = 16 + z^2$

$z^2 = 48$

$z = 4\sqrt{3}$

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

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

$105 = x^2 + 8x$

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

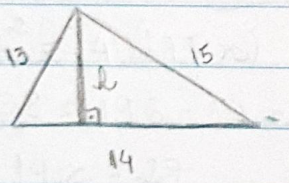
$\Delta = 64 - 4.1.(-105)$

$\Delta = 484$

$x = \frac{-8 \pm 22}{2} \rightarrow x = \frac{14}{2} = 7m$

Alternativa (D)

⑨

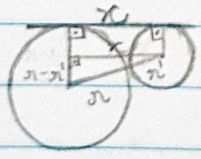


$15h = 13.14$

$15h = 182$

$h = 12,13$

⑩



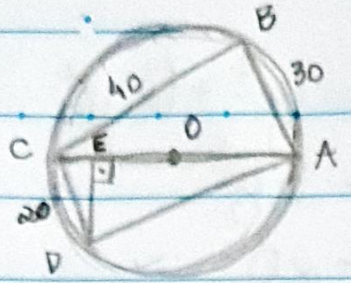
$(r + r')^2 = x^2 + (r - r')^2$

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

$x^2 = 4rr'$

$x = 2\sqrt{rr'}$

11)



$x^2 = 40^2 + 30^2$

$x^2 = 1600 + 900$

$x^2 = 2500$

$x = 50$

$20^2 = 50 \cdot \overline{CE}$

$400 = 50 \cdot \overline{CE}$

$\overline{CE} = 8$

Alternativa (C)