S T Q Q S S D

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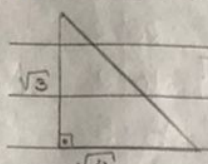
Tarefa Básica

1-



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

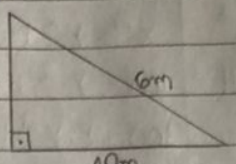
$x^2 = 3 + 4$

$x^2 = 7$

$\boxed{x = \sqrt{7}}$

B

2-



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

$36 = x^2 + 100$

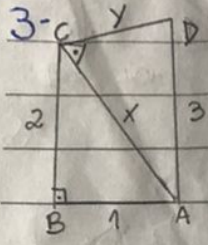
$x^2 = 100 - 36$

$x^2 = 64$

$x = \sqrt{64}$

$\boxed{x = 8\,m}$

3-



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

$x^2 = 5$

$x = \sqrt{5}$

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

$9 = 5 + y^2$

$y^2 = 9 - 5$

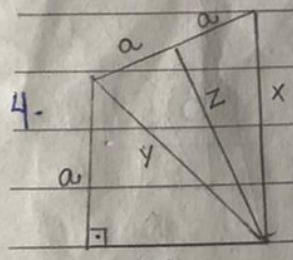
$y^2 = 4$

$y = \sqrt{4}$

$\boxed{y = 2}$

B

4-



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

$y = 2a^2$

$y = \sqrt{2a^2}$

$\boxed{y = 2a}$

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

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

$z^2 = 3a^2$

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

$\boxed{z = 3a}$

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

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

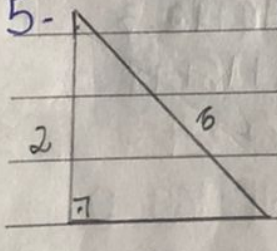
$x^2 = 4a^2$

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

$\boxed{x = 2a}$

B

5-



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

$36 = x^2 + 4$

$x^2 = 36 - 4$

$x^2 = 32$

$\boxed{x = \sqrt{32} \text{ ou } 4\sqrt{2}}$

$\Delta = \frac{b \cdot h}{2}$

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

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

$\boxed{\Delta = 4\sqrt{2}}$

32	2
16	2
8	2
4	2
2	2
1	

$\boxed{x = 4\sqrt{2}}$

C

__/__/__

S T Q Q S S D

6- A D 6 x B 8 C

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

$x^2 = 36 + 64$

$x^2 = 100$

$x = \sqrt{100}$

$x = 10$

$x^2 = y^2 + 2y^2$

$100 = y^2 + 4y^2$

$100 = 5y^2$

$y^2 = \frac{100}{5}$

$y^2 = 20$

$y = \sqrt{20}$ ou $2\sqrt{5}$

A

20	2
10	2
5	5
1	

7-

A = 16cm/N

F = 10cm/N

200cm

50cm → 5N

120cm

50cm x 120cm

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

$x^2 = 1440 + 2500$

$x = \sqrt{16900}$

$x = 130cm$ (÷100)

$x = 1,3m$

B

8- 13 8 y x 4

$8^2 = y^2 + 4^2$

$64 = y^2 + 16$

$64 - 16 = y^2$

$y^2 = 48$

$y^2 = \sqrt{48}$ ou $4\sqrt{3}$

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

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

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

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

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

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

48	2
24	2
12	2
6	2
3	3
1	

$4\sqrt{3}$

spiral

S T Q Q S S D

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

$\Delta = 64 + 420$

$\Delta = 484$

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

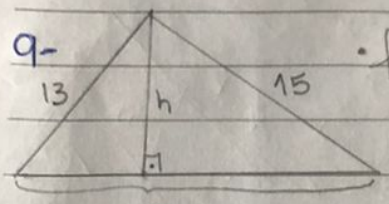
$x = \frac{-8 \pm 22}{2}$

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

(1)

$x' = \frac{-8+22}{2} = \frac{14}{2} = \boxed{7\,m}$

9-



• formula de heron

$p = \frac{(13+14+15)}{2} = \frac{42}{2} = 21$

$A = \sqrt{21(21-13)(21-14)(21-15)}$

$A = \sqrt{21.8.7.6}$

$A = \sqrt{7056}$

$A = 84$

$A = \frac{b.h}{2}$

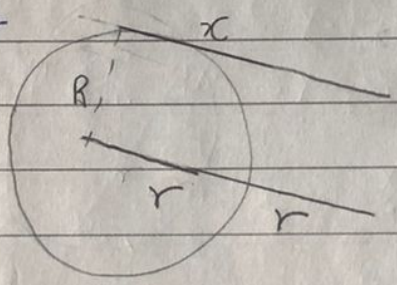
$84 = \frac{14.h}{2}$

$84 = 7h$

$h = \frac{84}{7}$

$\boxed{h = 12}$

10-



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

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

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

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

$x^2 = 4rr'$

$x = \sqrt{4rr'}$

$\boxed{x = 2\sqrt{rr'}}$

S T Q Q S S D

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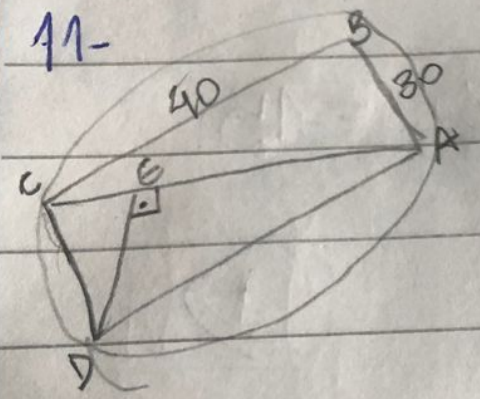
11-



$Ca^2 = 30^2 + 40^2$

$Ca^2 = 900 + 1600$

$Ca^2 = 25000$

$Ca = \sqrt{25000}$

$Ca = 50$

$C1) = AC . CE$

$20^2 = 50 . CE$

$400 = 50 CE$

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

$CE = 8$