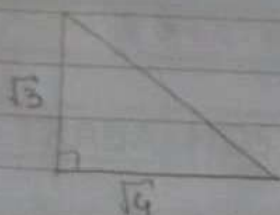


Lança Baíca - Triângulo Retângulo

01)



$$a^2 = b^2 + c^2$$

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

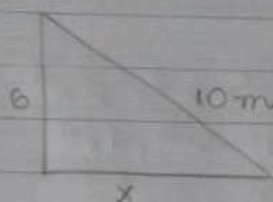
$$a^2 = 3 + 4$$

$$a^2 = 7$$

$$a = \sqrt{7}$$

R: B

02)



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

$$100 = 36 + x^2$$

$$x^2 = 100 - 36$$

$$x^2 = 64$$

$$x = \sqrt{64}$$

$$x = 8$$

R: 8 m

03)

 $\triangle ABC$

$$AC^2 = 2^2 + 3^2$$

$$AC^2 = 4 + 9$$

$$AC = \sqrt{13}$$

 $\triangle ACD$

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

$$9 = CD^2 + 5$$

$$CD^2 = 9 - 5$$

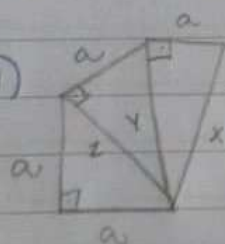
$$CD^2 = 4$$

$$CD = \sqrt{4}$$

$$CD = 2$$

R: B

04)



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

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

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

$$z = 2a$$

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

$$y^2 = 3a^2$$

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

$$y = 3a$$

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

$$x^2 = 4a^2$$

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

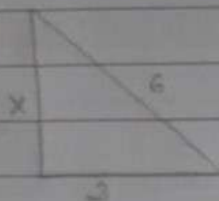
$$x = 2a$$

R: B

__/__/__

S T Q Q S S D

05)



$$6^2 = 3^2 + x^2$$

$$36 = 9 + x^2$$

$$x^2 = 36 - 9$$

$$x^2 = 27$$

$$x = \sqrt{27}$$

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

80

2

16

2

8

2

4

2

2

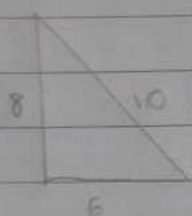
2

1

$$2 \cdot 2 = 4$$

R: A área é $4\sqrt{2}$ (c)

06)



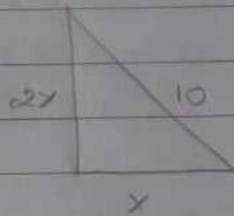
$$x^2 = 8^2 + 6^2$$

$$x^2 = 64 + 36$$

$$x^2 = 100$$

$$x = \sqrt{100}$$

$$x = 10$$



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

$$100 = x^2 + 36$$

$$100 = x^2 + 36$$

$$64 = x^2$$

$$x^2 = 64$$

$$x = 8$$

$$x^2 = 20$$

$$x = \sqrt{20}$$

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

20

10

5

1

2

2

5

1

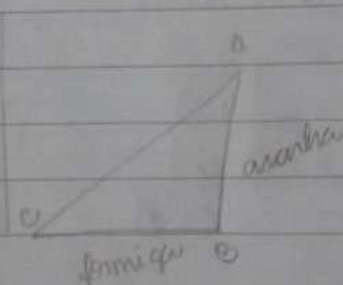
R: A

07) 5, respondendo

$$\text{aranha} - 16.5 = 80 \text{ cm} = 0,8 \text{ m A}$$

$$2 \text{ m} - 0,8 \text{ m} = 1,2 \text{ m do poste}$$

$$\text{formiga} - 10.5 = 50 \text{ cm} = 0,5 \text{ m B}$$



$$AC^2 = AB^2 + BC^2$$

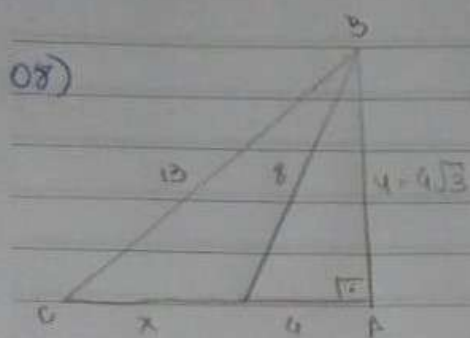
$$AC^2 = 1,2^2 + 0,8^2$$

$$AC^2 = 1,44 + 0,64$$

$$AC = \sqrt{2,08}$$

$$AC = 1,30 \text{ m}$$

R: B



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

$$48 \quad 2 \quad \sqrt{2}$$

$$64 = y^2 + 16$$

$$48 \quad 2$$

$$y^2 = 64 - 16$$

$$12 \quad 2 \quad \sqrt{2}$$

$$y^2 = 48$$

$$6 \quad 2$$

$$y = \sqrt{48}$$

$$3 \quad 3$$

$$y = 4\sqrt{3}$$

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

$$169 = (x^2 + 2 \times 4 + 16) + 16 \cdot 3$$

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

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

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

$$a = 1 \quad \Delta = 8^2 - 4 \cdot 1 \cdot (-105)$$

$$x = \frac{-b \pm \sqrt{\Delta}}{2a}$$

$$x_1 = \frac{-8 + 22}{2} = \frac{14}{2} = 7$$

$$b = 8 \quad \Delta = 64 + 420$$

$$c = -105 \quad \Delta = 484$$

$$x = \frac{-8 \pm \sqrt{484}}{2 \cdot 1}$$

$$x_2 = \frac{-8 - 22}{2} = \frac{-30}{2} = -15 \quad \text{negative}$$

Valor em m = 7m

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

r. d

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

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

$$x^2 = r^2 + 2r \cdot r' + r'^2 - r^2 + 2r \cdot r' - r'^2$$

$$x^2 = 4r \cdot r'$$

$$x = \sqrt{4r \cdot r'}$$

$$x = 2 \cdot r \cdot r'$$

$$11) x^2 = AB^2 + BC^2$$

$$C^2 = a \cdot n$$

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

$$20^2 = 50n$$

$$x^2 = 900 + 1600$$

$$400 = 50n$$

$$x^2 = 2500$$

$$50n = 400$$

$$x = \sqrt{2500}$$

$$n = \frac{400}{50} = 8 \quad \text{r. C}$$

$$x = 50 = CA$$