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Turma: CTII 348

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## Tarefa Básica.

1)

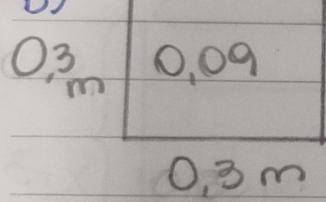
A)

400 peças de cerâmica  
 $36\text{ m}^2 \rightarrow$  Área da Sala

$$\text{Scada} = \frac{36}{400} = \underline{\underline{0,09\text{ m}^2}}$$

$$0,09\text{ m}^2$$

B)



$$\text{squadra} = l^2$$

$$0,09 = l^2$$

$$\sqrt{0,09} = l$$

$$0,3\text{ m} = l$$

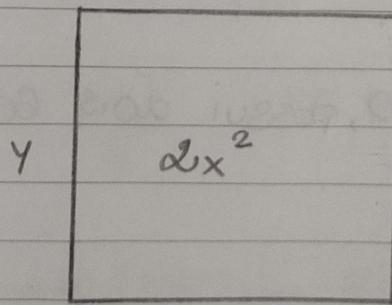
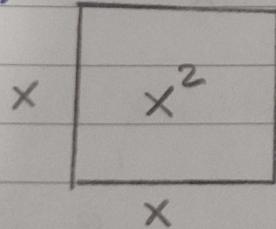
$$2p = 4 \cdot l$$

$$2p = 4 \cdot 0,3$$

$$2p = \underline{\underline{1,2\text{ m}}}$$

$$1,2\text{ m}$$

2)



$$\text{squadra} = l^2$$

$$\text{squadra} = x^2$$

$$\text{squadra} = l^2$$

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

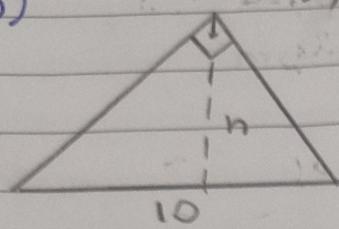
$$y = \sqrt{2x^2}$$

$$y = \sqrt{2} \cdot x$$

D

8

3)



$$S_{\text{triângulo}} = 15$$

$$S_{\text{triângulo}} = \frac{b \cdot h}{2}$$

$$15 = \frac{10 \cdot n}{2}$$

$$\frac{30}{10} = n \quad n = 3$$

(D)

4)

Sempre aumenta 1 NO lado

$$A = a + 16 \text{ m}^2$$

$$A_{\text{area}} = (2+3) \cdot 2 = 10$$

$$A - a = 10$$

$$A_{\text{area}} = (3+3) \cdot 3 = 18$$

$$A_{\text{area}} = (x+3) \cdot x$$

$$A_{\text{area}} = (4+3) \cdot 4 = 28$$

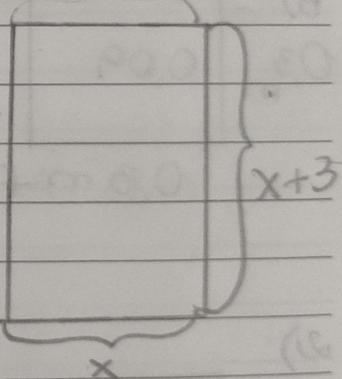
Observamos que a área cresce

$$10 \text{ m}^2 \text{ quando } x=2 \quad A_{\text{area}} = (2+3) \cdot 2$$

$$18 \text{ m}^2 \text{ quando } x=3 \quad A_{\text{area}} = \underline{\underline{70 \text{ m}^2}}$$

$$28 \text{ m}^2 \text{ quando } x=4$$

$$70 \text{ m}^2$$



5)

DCE é equilátero, possui dois  $60^\circ$

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

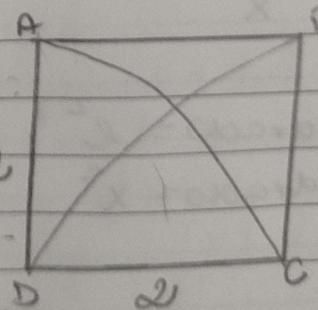
$$b = 2$$

$$h = 2 \cdot \sqrt{3}$$

$$S_{\text{triângulo DCE}} = \frac{2 \cdot \sqrt{3}}{2}$$

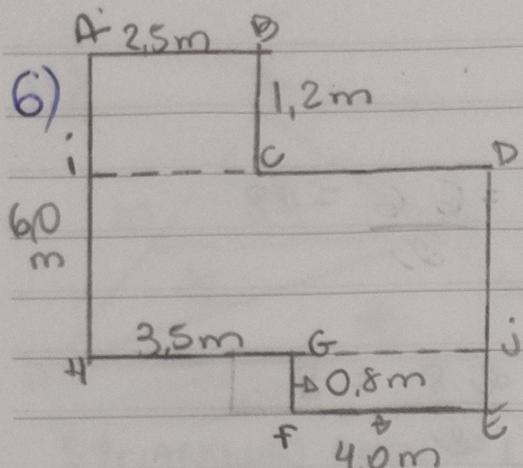
$$n = \sqrt{3}$$

$$S_{\text{triângulo DCE}} = \underline{\underline{\sqrt{3}}}$$



(B)

(A)



$$S_{\text{retangulo } DHIJ} = 7,5 \cdot 4,8$$

$$S_{\text{retangulo } DHIJ} = 36 \text{ m}^2$$

$$S_{\text{retangulo } EFGJ} = 4,0 \cdot 0,8$$

$$S_{\text{retangulo } EFGJ} = 3,2 \text{ m}^2$$

$$S_{\text{retangulo } ABCI} = 2,5 \cdot 1,2$$

$$S_{\text{retangulo } ABCI} = 3 \text{ m}^2$$

$$Hi = 6,0 - 1,2$$

$$Hi = 4,8 \text{ m}$$

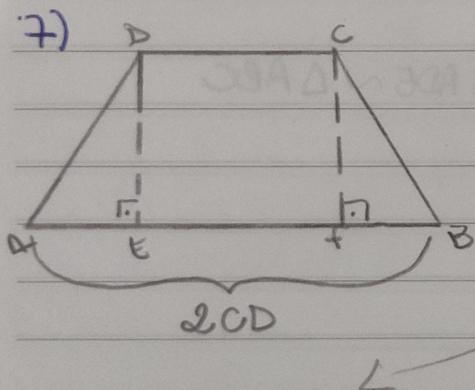
$$S_{\text{total}} = 36 + 3,2 + 3$$

$$S_{\text{total}} = \underline{\underline{42,2 \text{ m}^2}}$$

$$Hj = 3,5 + 4,0$$

$$Hj = 7,5 \text{ m}$$

(E)



$$S_{\text{trapezido}} = \frac{(B+b) \cdot h}{2}$$

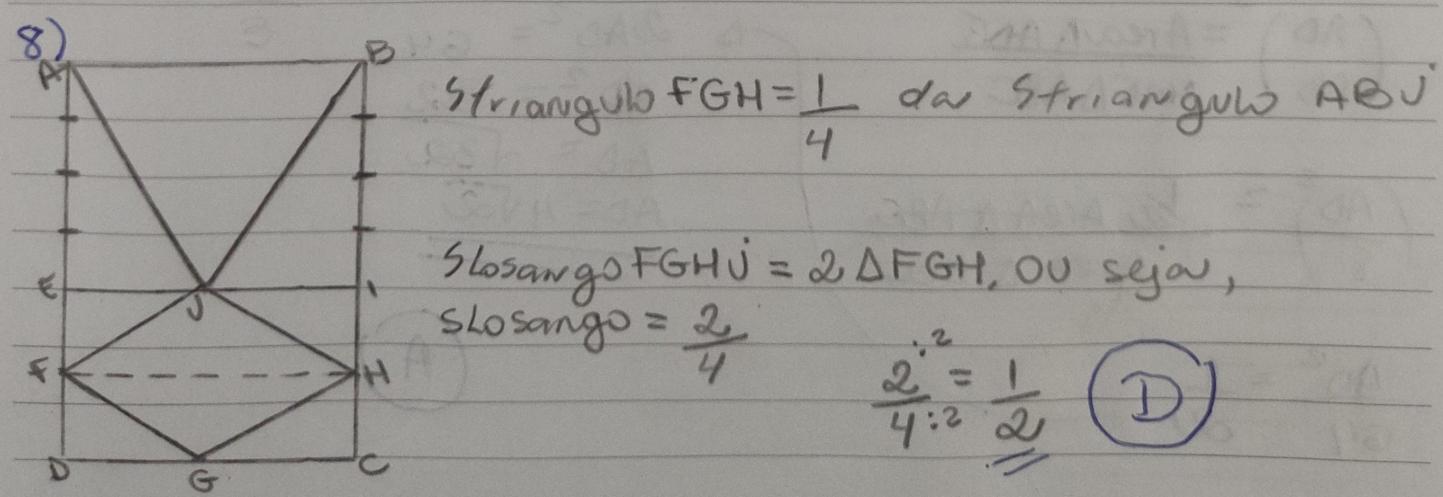
$$36 = \frac{(2CD+CD) \cdot h}{2}$$

(E)

$$72 = 3CD \cdot h$$

$$CD \cdot h = \frac{72}{3}$$

$$CD \cdot h = \underline{\underline{24}}$$



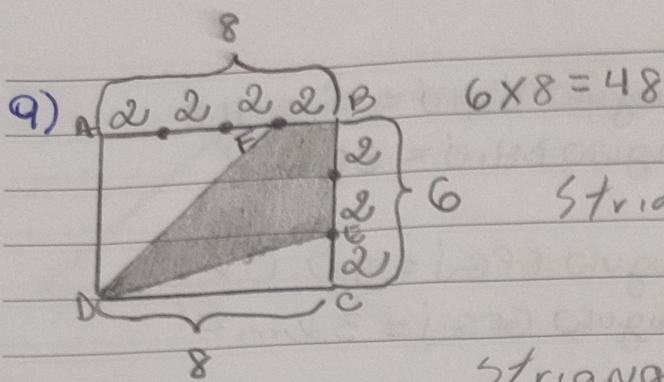
$$S_{\text{triangulo } FGH} = \frac{1}{4} \text{ da } S_{\text{triangulo } ABJ}$$

$$S_{\text{losango } FGHJ} = 2 \Delta FGH, \text{ ou seja,}$$

$$S_{\text{losango}} = \frac{2}{4}$$

$$\frac{2}{4} : 2 = \frac{1}{2}$$

(D)

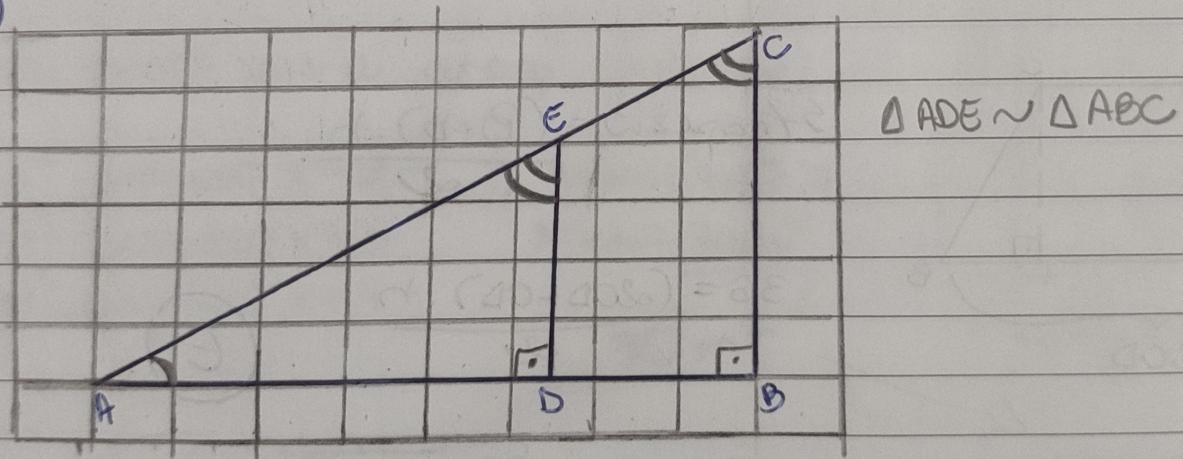


Quadrilatero =  $48 - 18 - 8$   
destacados

Quadrilatero =  $2 \cdot 2$   
destacados

(E)

10)



$$\left(\frac{AD}{AB}\right)^2 = \frac{\text{Area } \triangle ADE}{\text{Area } \triangle ABC}$$

$$\Delta 2AD^2 = 64$$

$$AD^2 = 32$$

$$AD = \sqrt{32}$$

$$AD = 4\sqrt{2}$$

$$\left(\frac{AD}{8}\right)^2 = \frac{1}{2} \frac{\text{Area } \triangle ADE}{\text{Area } \triangle ABC}$$

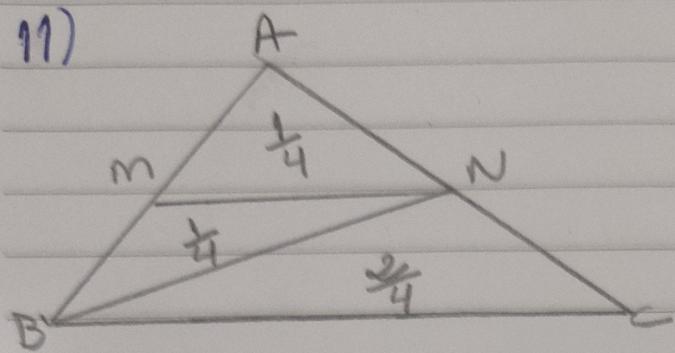
$$\frac{AD^2}{64} = \frac{1}{2}$$

(A)

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/ / /

11)



$$S_{\text{triangle } ABC} = 96 \text{ m}^2 = \frac{4}{4}$$

$$S_{\text{triangle } AMN} = \frac{1}{4} \cdot 96 = \frac{96}{4} = 24$$

$$\underline{\underline{72 \text{ m}^2}}$$

$$\text{Squadrilatero } BCMN = 96 - 24 = \underline{\underline{72 \text{ m}^2}}$$