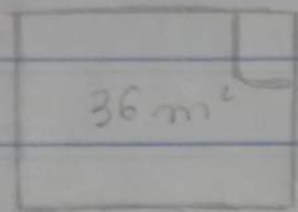


Tarefa básica

ÁREAS DE QUADRILÁTEROS E TRIÂNGULOS

1)



l

Área = ?



l

Perímetro = ?

A) A área de cada peça é dada pela razão da área da sala pela quantidade de peças:

$$A = \frac{400}{36}$$

$$\rightarrow A = 0,09 \text{ m}^2$$

B) Sabendo o lado de cada peça através da área:

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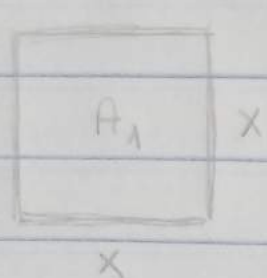
$$A = l^2$$

$$9,09 = l^2$$

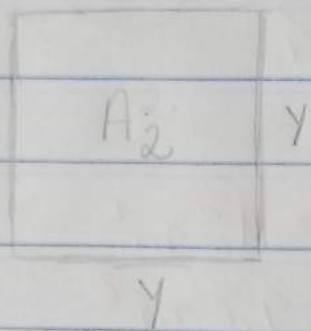
$$l = \sqrt{9,09} = 0,3 \rightarrow \text{calcula-se o perímetro:}$$

$$P = 4 \cdot 0,3 = 1,2 \text{ m}$$

2)



$$A_1 = x^2$$



$$A = y^2$$

\rightarrow o dobro de A_1

$$A_2 = 2A_1$$

$$y^2 = 2 \cdot x^2$$

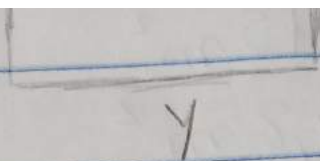
$$y = \sqrt{2x^2}$$

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

Alternativa D)



$$A = x^2$$



$$A = y^2$$

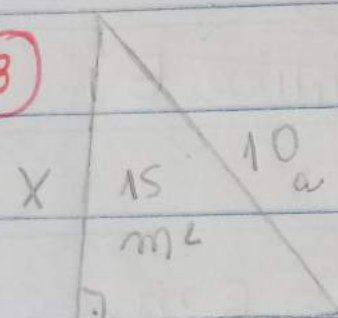
$$y = \sqrt{2}x$$

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

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

Alternativa D)

3



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

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

$$10x = 30$$

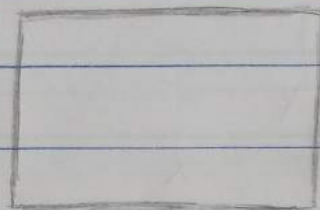
$$10x = 30$$

$$x = \frac{30}{10}$$

$$x = 3$$

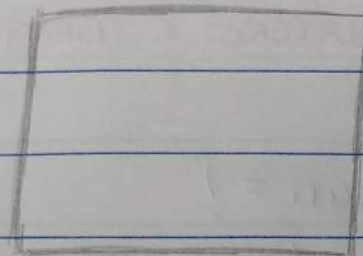
Alternativa D)

4



x

$x-3$



$x+1$

$x-3+1$

$x-2 //$

$$A = b \cdot l$$

$$A = x \cdot (x-3)$$

$$A = b \cdot l$$

$$A = (x+1) \cdot (x-2) + 16$$



$$(x+1) \cdot (x-2) = (x \cdot (x-3)) + 16$$

$$x^2 - 2x + x - 2 = x^2 - 3x + 16$$

$$\cancel{x^2} - \cancel{x^2} - x + 3x = 16 + 2$$

$$2x = 18$$

$$x = \frac{18}{2} = 9 \text{ m}$$

2

$$\triangleright (x+1) \cdot (x-2) = A$$

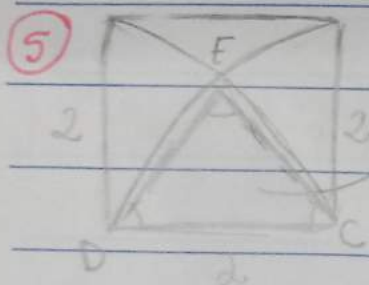
$$(9+1) \cdot (9-2) = A$$

$$A = 10 \cdot 7$$

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

$$\frac{x = 18 = 9m}{2}$$

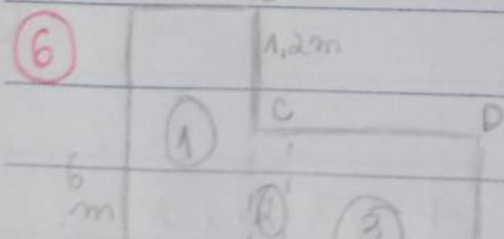
$A = 40 \text{ m}^2$



► Triângulo equilátero

\overline{DE} , \overline{CE} e \overline{CD} medem 2, são os raios dos arcos

$$A_{\Delta} = \frac{2^4 \sqrt{3}}{4} \quad A_{\Delta} = \frac{\cancel{4} \sqrt{3}}{\cancel{4}} = \sqrt{3} \quad \text{Alternativa B)}$$



$$A_1 = 6.2, S = 15 \text{ m}^2$$

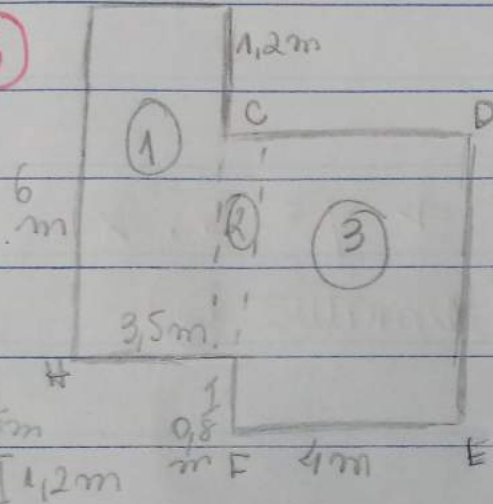
$$A_2 = 4,8 \cdot 1 = 4,8 \text{ m}^2$$

$$D_2 = L \subseteq C = 22 \text{ from 4}$$

$$H_{\Delta} = \frac{2 \cdot 13}{4} \quad H_{\Delta} = \frac{1 \cdot 13}{4} = 13 \quad (\text{Alternative B})$$

⑥

A 2,5m B



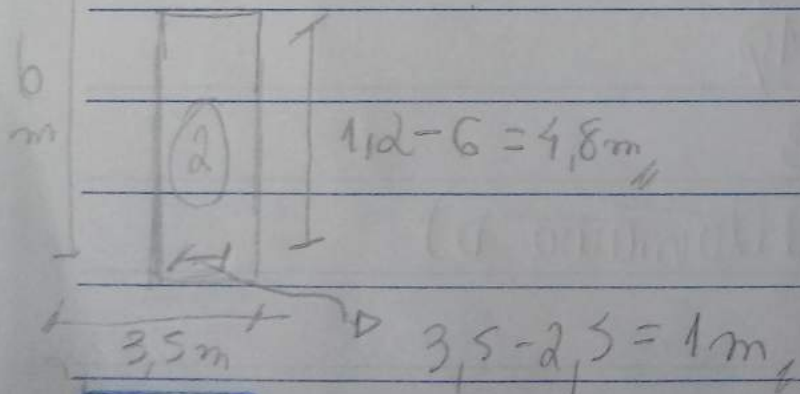
$$A_1 = 6 \cdot 2,5 = 15 \text{ m}^2$$

$$A_2 = 1,2 \cdot 1,2 = 1,44 \text{ m}^2$$

$$A_3 = 4,8 \cdot 3,5 = 16,8 \text{ m}^2$$

$$A_{\text{total}} = 15 + 1,44 + 16,8 = 33,24 \text{ m}^2$$

(Alternative E)



$$1,2 - 6 = 4,8 \text{ m}$$

$$3,5 - 2,5 = 1 \text{ m}$$

③

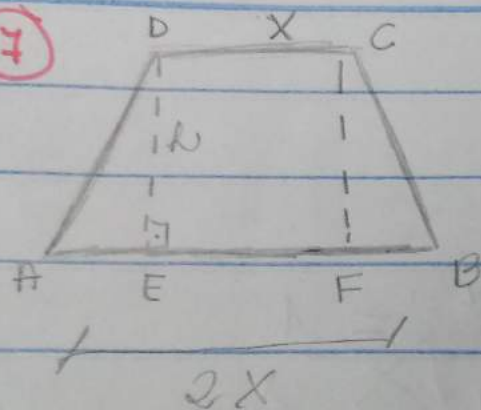
$$4,8 \text{ m}$$

$$4,8 + 0,8 = 5,6 \text{ m}$$

$$4 \text{ m}$$

tilibra

7



$$AB = 2CD$$

$$A_D = 36 \text{ cm}^2$$

$$AB = 2x$$

$$CD = x$$

$$A = \frac{(2x + x) \cdot h}{2}$$

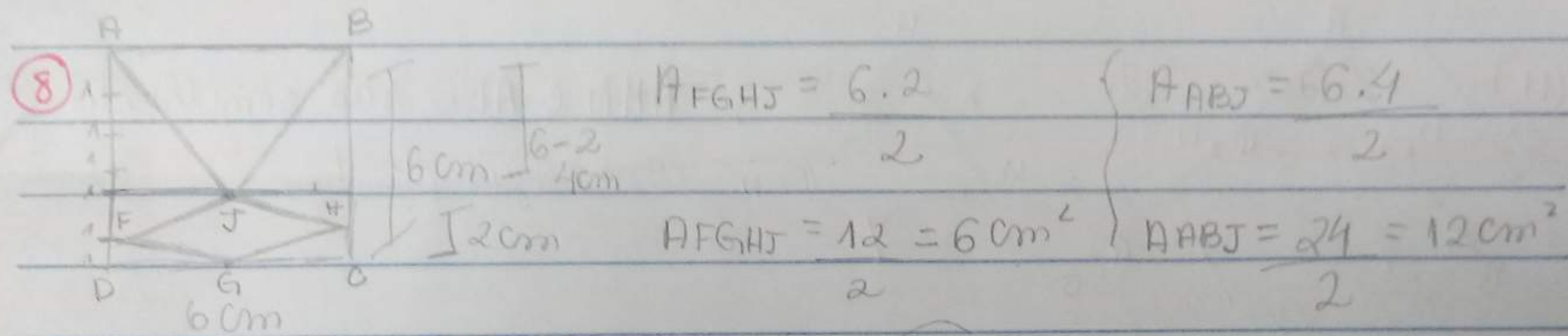
$$36 = \frac{3x \cdot h}{2}$$

$$72 = 3x \cdot h$$

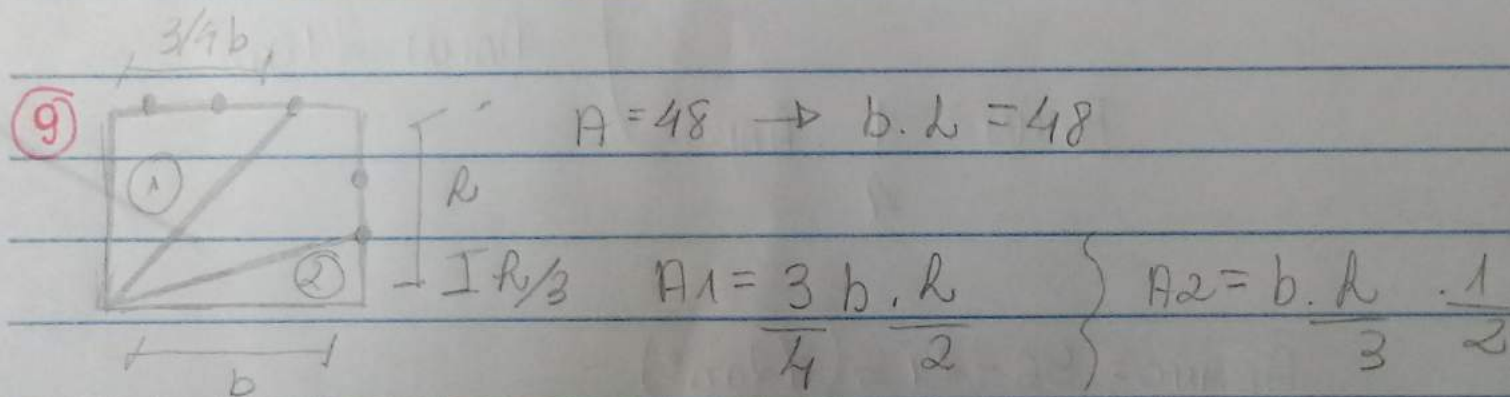
$$x \cdot h = \frac{72}{3}$$

$$x \cdot h = 24 \text{ cm}^2$$

Alternativa
E)



$A_{FGHJ} = \frac{6 \cdot 6}{2} = \frac{18}{2} = 9$
 $A_{ABJ} = \frac{12 \cdot 6}{2} = 36$
 alternativa D)

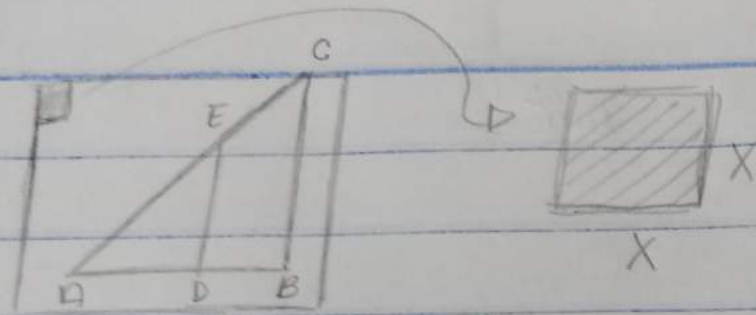


$A_{quadrilátero} = 48 - \frac{3}{4} b \cdot l - \frac{1}{3} b \cdot l$

$A_q = 48 - \frac{3}{4} \cdot 48 - \frac{1}{3} \cdot 48 = 48 - 36 - 16 = -4$

$A_q = 48 - 18 - 8 = 22$ Alternativa E)

10



$$ADE \sim ABC$$

8
quadrados

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

$$\left(\frac{AD}{18}\right)^2 = \frac{1}{2 \cdot A_{ABC}}$$

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

$$2AD^2 = 64$$

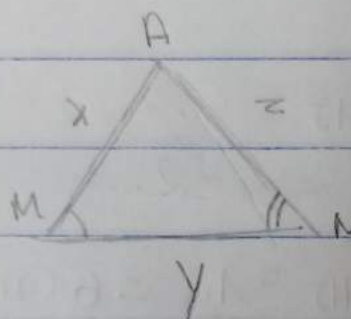
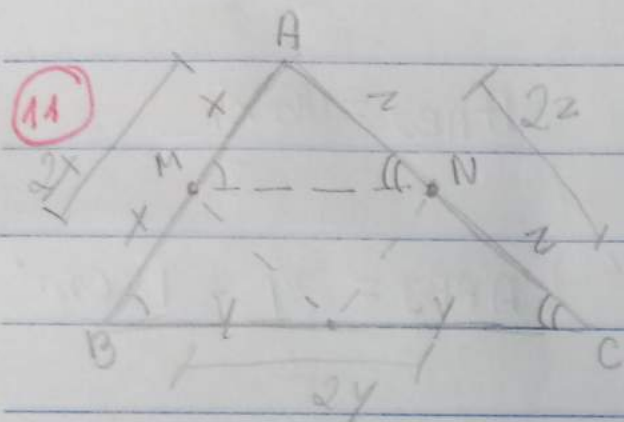
$$AD^2 = \frac{64}{2}$$

$$AD = \sqrt{32}$$

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

Alternativa A)

Alternativa A)



AMN e ABC não semelhantes

com razão $\rightarrow \frac{1}{2}$

$$\frac{A_{AMN}}{A_{ABC}} = \left(\frac{1}{2}\right)^2$$

$$\rightarrow A_{AMN} = \frac{96}{4}$$

$$A_{AMN} = 24 \text{ m}^2$$

$$A_{AMN} = \frac{1}{4} \cdot A_{ABC}$$

$$A_{BMNC} = 96 - 24 = 72 \text{ m}^2$$