

Nome: Mikaela dos Santos Ferreira Prontuário:1890336 CTII-348

## Áreas de quadriláteros e triângulos

Exercícios 1, 2 e 3

01.

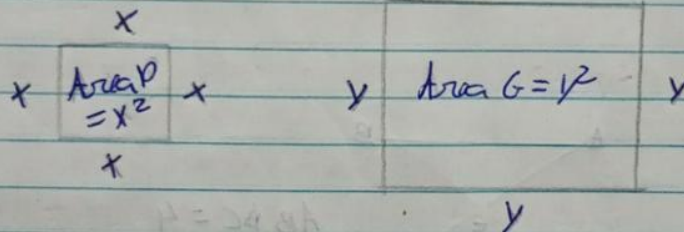
$$a) \frac{36m^2}{400} = 0,09m^2$$

$$b) l^2 = 0,09m^2$$

$$l = 0,03m$$

$$4 \cdot 0,3 = 1,2m$$

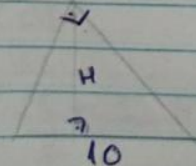
02.



$$\text{Area G} = 2 \cdot \text{Area P}$$

$$Y = X\sqrt{2} \quad \text{Resposta D}$$

03



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

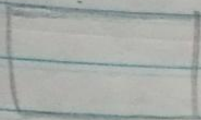
$$10H = 30$$

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

$$H = 3 \quad \text{Resposta D}$$

Exercícios 4 e 5

04.



lado = 3 metros

$$A = B \cdot H$$

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

$$A = x^2 + 3x$$

$$\Delta = 4^2 - 4 \cdot 2 \cdot 16$$

$$\Delta = 16 + 128$$

$$\Delta = 144$$

$$A + 16 = (x^2 + 1) + (3x + 1)$$

$$16A = 2x^2 + 4x$$

$$A = 2x^2 + 4x + 16$$

$$\frac{-4 \pm 12}{4} \quad x' = 2$$

$$x'' = -4$$

$$A = 144 - 4 / 2$$

$$A = 70$$

05.

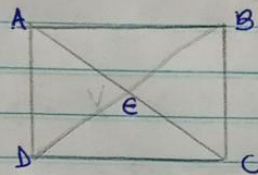
DEC.

$$A = \frac{Z \cdot H}{Z}$$

$$H = \pi$$

$$A = \sqrt{3}$$

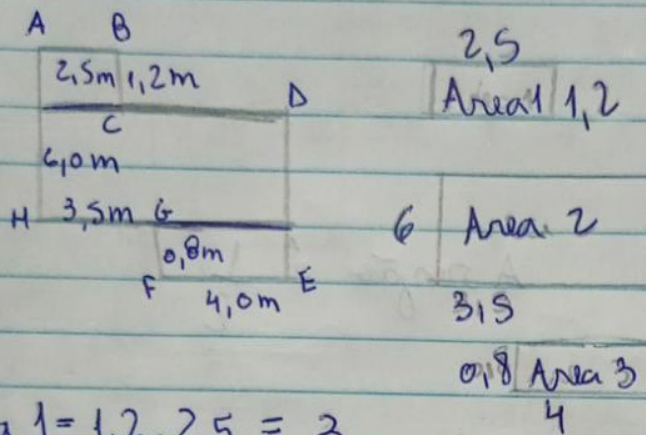
Resposta B



$$AB \cdot DC = 4$$

Exercícios 6 e 7

06.



$$\text{Area 1} = 1,2 \cdot 2,5 = 3$$

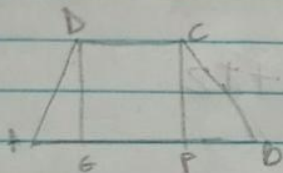
$$\text{Area 2} = (6 - 1,2) \cdot (3,5 + 4) = 36$$

$$\text{Area 3} = 4 \cdot 0,8 = 3,2$$

$$\text{Area 1} + \text{Area 2} + \text{Area 3}$$

$$3 + 36 + 3,2 = 42,2 \text{ Resposta E}$$

07.



$$AB = 2 \cdot CD$$

$$36 \cdot 2 = 3 \cdot CD \cdot H$$

$$72 = 3 \cdot CD \cdot H$$

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

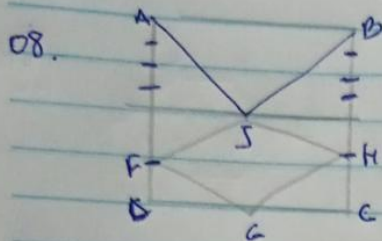
$$CD \cdot H = \frac{72}{3}$$

$$36 = \frac{3 \cdot CD \cdot H}{2}$$

$$CD \cdot H = 24$$



# Exercícios 8 e 9



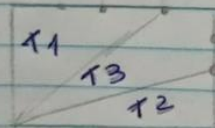
$$FGH = \frac{1}{4} \text{ de } ABJ$$

A razão é  $\frac{1}{2}$

$$FGHJ = 2 \cdot FGH$$

$$FGHJ = \frac{2}{4} \text{ de } ABJ$$

09.



$$T3 = \text{Área total} - T1 + T2$$

$$40 \cdot 30 = 48$$

$$120^2 = 48$$

$$U^2 = 36/12$$

$$U^2 = 4$$

$$U = \sqrt{4}$$

$$U = 2$$

$$T3 = 48 - 26$$

$$T3 = 22$$

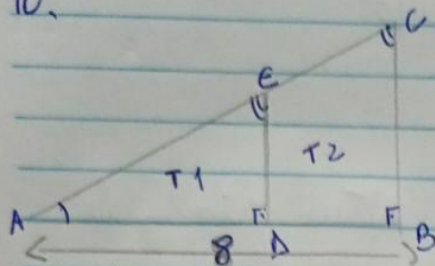
Resposta é

$$T1 = \frac{6 \cdot 6}{2} = 18$$

$$T2 = \frac{8 \cdot 2}{2} = 8$$

Exercícios 10 e 11

10.



$$\triangle ADE \sim \triangle ABC$$

$$\left(\frac{AD}{AB}\right)^2 = \frac{A_1}{A_2}$$

$$2AD^2 = 64$$

$$AD^2 = 64/2$$

$$AD^2 = 32$$

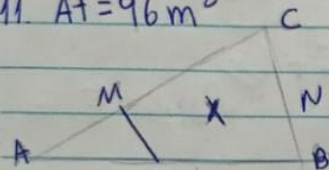
$$AD = \sqrt{32} = \sqrt{16 \cdot 2}$$

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

Resposta A

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

$$11. A_1 = 96 \text{ m}^2$$



$$\triangle ABC = X + \triangle AMN$$

$$X = \triangle ABC - \triangle AMN$$

$$MN = \frac{1}{2}$$

$$X = 96 - \frac{1}{4}(96)$$

$$\triangle ABC \sim \triangle AMN$$

$$\frac{\triangle AMN}{\triangle ABC} = \frac{1}{4}$$

$$X = 96 - 24$$

$$X = 72 \text{ m}^2$$