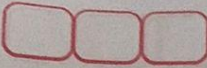


Área de Polígono



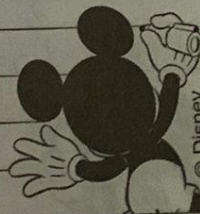
Tarefa Básica - Área de Polígono

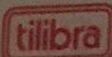
① A soma dos ângulos interiores de um polígono, é dada por $(n-2)180^\circ$. Sendo $(6-2)180 = 720^\circ$.
 4 ângulos e cada um com 135° :
 $A+B+D+E = 540^\circ$. Os ângulos C e F tem cada um 90° , sendo triângulos retângulos.
 $X^2 = 5^2 + 5^2$
 $X^2 = 50$
 $X = 5(\sqrt{2})$

$A = 5 \times 5(\sqrt{2})$
 $A = 25(\sqrt{2})$
 $\text{Altura} = (5 \times 5) / 5(\sqrt{2})$
 $\text{Altura} = 5(\sqrt{2}) / 2$
 $A = \frac{1}{2} [5(\sqrt{2})] \times \frac{5(\sqrt{2})}{2} \times \frac{1}{2}$
 $A = 25/2$
 $A = 2 \times (\text{área do triângulo}) + \text{área do retângulo}$
 $A = 2 \times (25/2) + 25\sqrt{2}$
 $A = 25 + 25\sqrt{2}$
 $A = 25(\sqrt{2} + 1)$

Tarefa E

② A fórmula da área de um triângulo equilátero é:
 $A = (l^2 \sqrt{3}) / 4$
 $16\sqrt{3} = (l^2 \sqrt{3}) / 4$
 $64\sqrt{3} = l^2 \sqrt{3}$
 $64\sqrt{3} / \sqrt{3} = l^2$
 $64 = l^2 \Rightarrow l = 8$





A altura desse triângulo é calculada

$$h = 1\sqrt{3}/2$$

$$h = 8\sqrt{3}/2$$

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

A altura desse triângulo e a diagonal do quadrado são iguais

$$h = d$$

$$d = 1\sqrt{2}$$

$$1 = 4\sqrt{3}/\sqrt{2} \text{ racionaliza}$$

$$1 = 4\sqrt{6}/2$$

$$1 = 2\sqrt{6}$$

$$A = 1^2$$

$$A = (2\sqrt{6})^2$$

$$A = 4 \cdot 6$$

$$A = 24 \text{ m}^2$$

Ytira B

③ Calcular as áreas dos três triângulos:

$$(APC) = \frac{2 \cdot h_1}{2}$$

$$(APB) = \frac{2 \cdot h_2}{2}$$

$$(BPC) = \frac{2 \cdot h_3}{2}$$

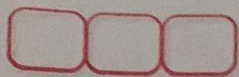
$$\frac{2 \cdot h_1}{2} + \frac{2 \cdot h_2}{2} + \frac{2 \cdot h_3}{2} = \frac{(ABC) = \sqrt{3}}{2}$$

$$h_1 + h_2 + h_3 = \sqrt{3}$$

$$h_1 + h_2 + h_3 = \sqrt{3}$$

Ytira B





$$(4) S_{\Delta amn} = 1$$

$$S_{\Delta abc} = 4$$

$$S_{\Delta amn} = 1$$

$$4S_{\Delta abc}$$

$$x = 96 - 1(96)$$

$$4$$

$$x = 96 - 24$$

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

$$(5) \text{Yarasa } a+b=10$$

$$B.H$$

$$\text{Yarasa } BC=6$$

$$2$$

$$10^2 = 6^2 + a^2$$

$$a = 8.6$$

$$100 = 36 + a^2$$

$$2$$

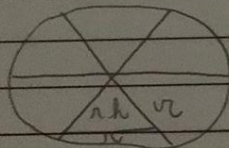
$$64 = a^2$$

$$a = 24$$

$$a = 8$$

$$\text{Yarasa } A$$

(6)



$$r = 4 \text{ cm}$$

$$S_{\Delta} = \frac{1}{2} \sqrt{3} = \frac{4^2 \sqrt{3}}{4} = 4\sqrt{3}$$

$$(4\sqrt{3})^2$$

$$16 \cdot 3 = 48 \text{ cm}$$

