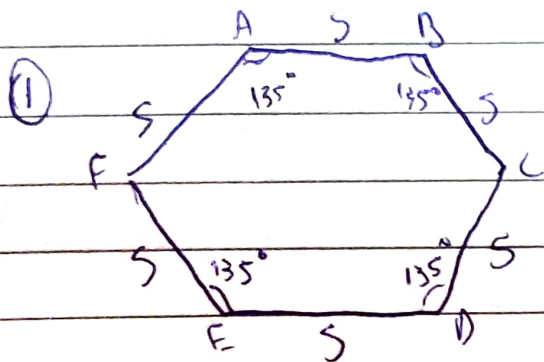


TARPEA BASICA - AREA de Poligonos



A = ? - ABDE \rightarrow Retângulo

$$A + B + D + E = 135^\circ \cdot 4 = 540^\circ$$

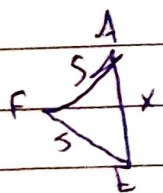
A soma dos ângulos internos de um polígono é:

$$S = (n-2) \cdot 180 = (6-2) \cdot 180 = 720^\circ$$

$$540^\circ + 180^\circ = 720^\circ$$

1

C e F medem 90° , Assim formando 2 triângulos
Retângulo \rightarrow AFE e BCD

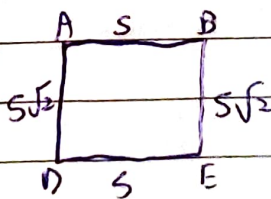


$$x^2 = 5^2 + 5^2$$

$$x^2 = 25 + 25$$

$$x = 50$$

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



$$AD = b \cdot h$$

$$AD = 5 \cdot 5\sqrt{2}$$

$$AD = 25\sqrt{2} \text{ cm}^2$$

$$AD = \frac{5 \cdot 5}{2}$$

$$AD = \frac{25 \text{ cm}^2}{2}$$

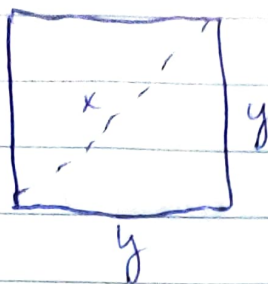
$$A_{\text{total}} = 2 \cdot AD + AD$$

$$A_{\text{total}} = \frac{2 \cdot 25 + 25\sqrt{2}}{2}$$

$$A_{\text{total}} = 25(\sqrt{2} + 1) \text{ cm}^2$$

Alternativa E

②



$$A_D = y^2 \rightarrow x^2 = y^2 + y^2$$

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

$$16 \cdot 3 = 2y^2$$

$$y^2 = \frac{16 \cdot 3}{2}$$

$$A_D = 16\sqrt{3} \text{ m}^2$$

$$\frac{l^2 \sqrt{3}}{4} = 16\sqrt{3}$$

4

$$l^2 = \frac{16\sqrt{3} \cdot 4}{\sqrt{3}}$$

$$l^2 = 64$$

$$l = \sqrt{64}$$

$$l = 8 \text{ m}$$

$$x_D = \frac{l\sqrt{3}}{2}$$

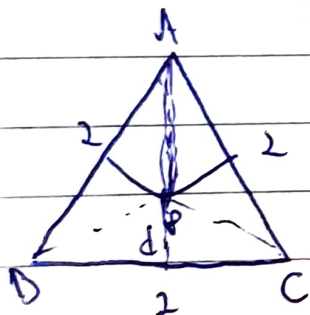
$$x_D = \frac{8\sqrt{3}}{2}$$

$$x_D = 4\sqrt{3} \text{ cm}$$

$$y^2 = 24$$

(Alternativa B)

③



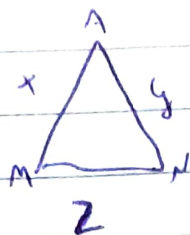
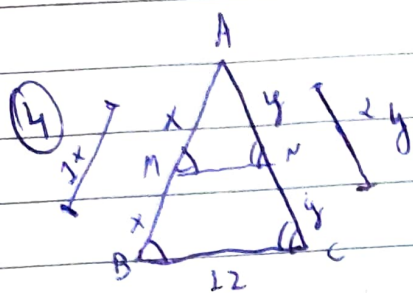
d = distância entre ponto P e lados do triângulo ABC. e altura dos triângulos BCP, ABP e ACP

$$A_{DABC} = \frac{2^2 \sqrt{3}}{4} = \frac{4\sqrt{3}}{4} = \sqrt{3}$$

$$A_{DABC} = A_{DBCP} + A_{DABP} + A_{DACP}$$

$$\sqrt{3} = \frac{2 \cdot d_1}{2} + \frac{2 \cdot d_2}{2} + \frac{2 \cdot d_3}{2}$$

$$d_1 + d_2 + d_3 = \sqrt{3} \quad \text{Alternativa B}$$



AMN e ABC são semelhantes
com razão $\frac{1}{2}$

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

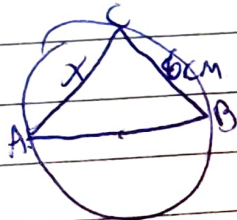
$$A_{\Delta AMN} = \frac{1}{4} \cdot A_{\Delta ABC}$$

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

$$A_{\Delta AMN} = 24$$

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

⑤



$$R = 5 \text{ cm} \quad A_{\Delta} = ?$$

$$2R = 2 \cdot 5 = 10 \text{ cm}$$

diâmetro

O ângulo oposto ao diâmetro é reto, se o diâmetro for um dos lados do triângulo inscrito.

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

$$100 = 36 + x^2$$

$$x = \sqrt{64}$$

$$x = 8 \text{ cm}$$

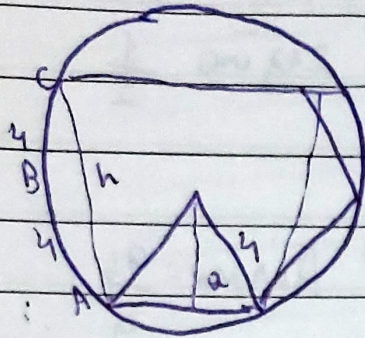
$$A = \frac{A \cdot B \cdot C}{4 \cdot R}$$

$$A = \frac{10 \cdot 8 \cdot 6}{4 \cdot 5}$$

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

Alternativa A

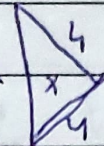
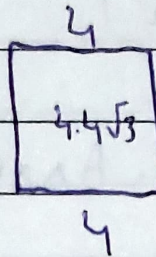
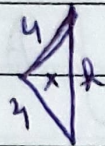
6



$$R = 4 \text{ cm} \quad (AA)^2 = ?$$

$$A = \frac{R\sqrt{3}}{2}$$

$$2 \cdot A = h$$



$$2 \cdot \frac{4\sqrt{3}}{2} = R$$

$$R = 4\sqrt{3} \text{ cm}$$

$$A_{\text{box}} - AD = A_0 + A_1$$

$$(P.A) - 4 \cdot 4\sqrt{3} = x + x$$

$$\frac{6 \cdot 4}{2} + \frac{2 \cdot 4\sqrt{3}}{2} - 16\sqrt{3} = 2x$$

$$2x = 6 \cdot 2 + 2\sqrt{3} - 16\sqrt{3}$$

$$2x = 12 + 2\sqrt{3} - 16\sqrt{3}$$

$$2x = 24\sqrt{3} - 16\sqrt{3}$$

$$2x = \frac{8\sqrt{3}}{2} = 4\sqrt{3} \text{ cm}^2$$

$$(AD)^2 = x^2$$

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

$$x^2 = 16 \cdot 3$$

$$x^2 = 48 \text{ cm}^2$$