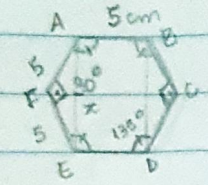
Tarefa Básica

① 

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

$x^2 = 50$

$x = 5\sqrt{2}$ cm

Soma ângulos internos = 720°

50	2
25	5
5	5
1	

$\hat{C}$ e $\hat{F} = 90°$

$A_{AFE} = A_{BCD} = \frac{5.5}{2} = \frac{25}{2}$ cm²

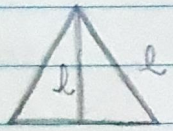
$A_{ABDE} = 5 . 5\sqrt{2} = 25\sqrt{2}$ cm²

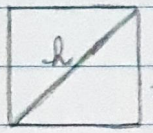
$A_{ABCDEF} = A_{AFE} + A_{BCD} + A_{ABDE}$

$A_{ABCDEF} = 25 + 25\sqrt{2}$

$A_{ABCDEF} = 25(1 + \sqrt{2})$ cm²

Alternativa (E)

② 



$A_\Delta = 16\sqrt{3}$ m²

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

$64\sqrt{3} = l^2\sqrt{3}$

$l = 8$ m

$16\sqrt{3} = \frac{8l}{2}$

$32\sqrt{3} = 8l$

$l = 4\sqrt{3}$ m

$l = x\sqrt{2}$

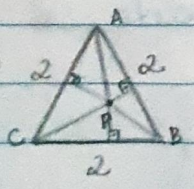
$4\sqrt{3} = x\sqrt{2}$

$x = \frac{4\sqrt{3}}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{4\sqrt{6}}{2} = 2\sqrt{6}$ m

$A_\square = (2\sqrt{6})^2$

$A_\square = 4 . 6 = 24$ m²

Alternativa (B)

③ 

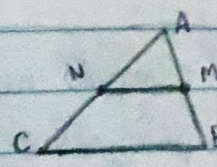
$A_{ABC} = \sqrt{3}$

$A_{APB} + A_{BPC} + A_{APC} = \sqrt{3}$

$\frac{2 . h_1}{2} + \frac{2 . h_2}{2} + \frac{2 . h_3}{2} = \sqrt{3}$

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

Alternativa (B)

④ 

$\overline{AM} = \frac{\overline{AB}}{2}$ $\overline{AN} = \frac{\overline{AC}}{2}$ $\overline{MN} = \frac{\overline{BC}}{2} = K = \frac{1}{2}$

$$\frac{A_{AMN}}{A_{ABC}} = K^2 = \left(\frac{1}{2}\right)^2 = \frac{1}{4}$$

$A_{BMNC} = A_{ABC} - A_{AMN}$

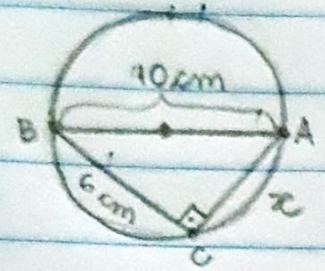
$A_{BMNC} = 96 - 24$

$A_{BMNC} = 72\ m^2$

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

$$A_{AMN} = \frac{1}{4} \cdot 96 = \frac{96}{4} = 24$$

⑤



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

$100 + 36 + x^2$

$x^2 = 64$

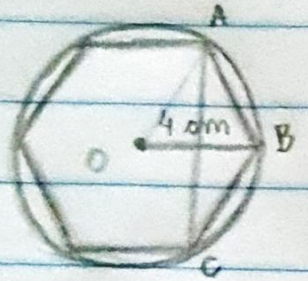
$x = 8$

$$A_{ABC} = \frac{6 \cdot 8}{2}$$

$A_{ABC} = 24\ cm^2$

Alternativa (A)

⑥



$$A_{ABC} = A_{ABO} = \frac{4^2\sqrt{3}}{4} = \frac{16\sqrt{3}}{4} = 4\sqrt{3}$$

$(4\sqrt{3})^2 = 16 \cdot 3 = 48$