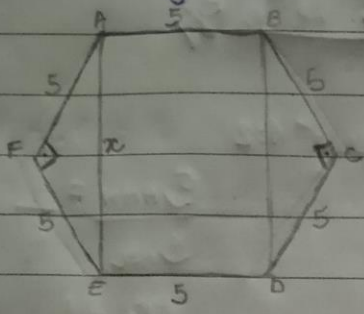
Nome: Kemily Teixeira Cruz CTII - 317

Tarefa Básica - Área de Polígonos

01.



Soma dos ângulos internos

$S_{AI} = (n-2).180°$

$S_{AI} = 6-2.180°$

$S_{AI} = 720°$

$\hat{A}+\hat{B}+\hat{D}+\hat{E} = 540°$

$720° - 540° = 180°$

$\hat{C}+\hat{F} = 180°$

$\hat{C} = \hat{F} = 90°$

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

$x^2 = 25+25$

$x = \sqrt{50}$

$x = 5\sqrt{2}$

$S_{ABDE} = b.h$

$S_{ABDE} = 5.5\sqrt{2}$

$S_{ABDE} = 25\sqrt{2}$

$S_{AFE} = \frac{b.h}{2}$

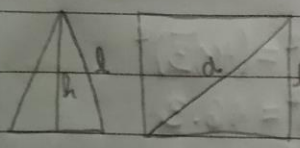
$S_{AFE} = \frac{5.5}{2} = \frac{25}{2}$

$S_{ABCDEF} = 2.S_{AFE} + S_{ABDE}$

$S_{ABCDEF} = 2.\frac{25}{2} + 25\sqrt{2}$

$S_{ABCDEF} = 25(\sqrt{2}+1)$ Letra E!

02.



$l.d = h$

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

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

$l^2 = 64$

$l = \sqrt{64}$

$l = 8$

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

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

$h = 4\sqrt{3}$

$d = l\sqrt{2}$

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

$l = \frac{4\sqrt{3}}{\sqrt{2}} . \frac{\sqrt{2}}{\sqrt{2}}$

$l = \frac{4\sqrt{6}}{2}$

$l = 2\sqrt{6}$

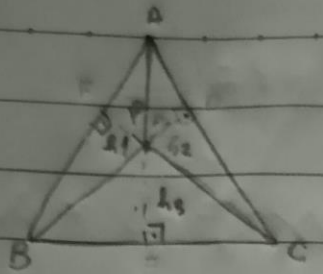
$S_Q = l^2$

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

$S_Q = 4.6$

$S_Q = 24$ Letra B!

03.

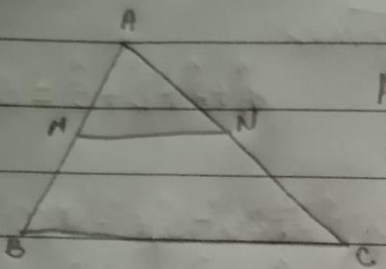


$S_{ABC} = S_{APB} + S_{APC} + S_{BPC}$

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

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

04.



A razão de semelhança é 1:2

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

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

$\frac{x}{96} = \frac{1}{4}$

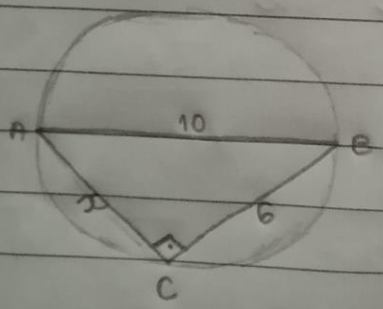
$4x = 96$

$x = 24$

$S_{MNBC} = 96 - 24$

$S_{MNBC} = 72\ m^2$

05.



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

$100 - 36 = x^2$

$x = \sqrt{64}$

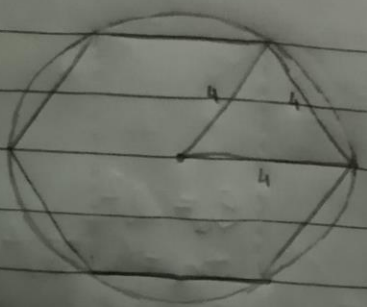
$x = 8$

$S = \frac{b \cdot h}{2}$

$S = \frac{6 \cdot 8}{2}$

$S = 24$ Letra A

06.



$A = \frac{\ell^2 \sqrt{3}}{4}$

$A = \frac{4^2 \sqrt{3}}{4}$

$A = \frac{16\sqrt{3}}{4}$

$A = 4\sqrt{3}$

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

$A^2 = 16 \cdot 3$

$A^2 = 48$