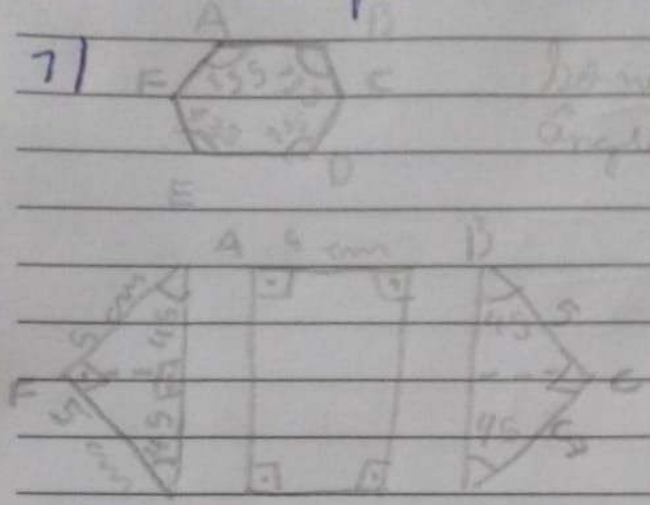
CREATE IT.

Tarefa Básica.

7]



$S_{interno} = (n-2) \cdot 180°$

$S_{interno} = (6-2) \cdot 180°$

$S_{interno} = 720°$

$A + B + D + E = 540°$

$F + C = 180°$

$AE^2 = 5^2 + 5^2$

$AE = \sqrt{50}$

$AE = \sqrt{2 \cdot 5^2}$

$AE = 5\sqrt{2}$

$\sin 45° = \frac{h}{5}$

$\frac{\sqrt{2}}{2} \times \frac{h}{5}$

$2h = 5\sqrt{2}$

$h = \frac{5\sqrt{2}}{2}$

$S_{AEF} = \frac{(5\sqrt{2}) \cdot \left(\frac{5\sqrt{2}}{2}\right)}{2}$

$S_{AEF} = \frac{25\sqrt{4}}{2}$

$S_{AEF} = \frac{50}{2}$

$S_{AEF} = 25 \text{ cm}^2$

$S_{ABCDEF} = 25\sqrt{2} + 2 \cdot \left(\frac{25}{2}\right)$

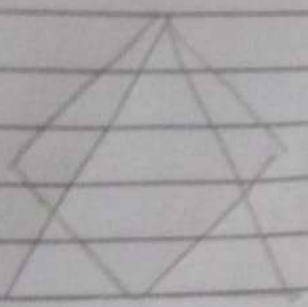
$= 25\sqrt{2} + 25$

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

alternativa (E)

CREATE IT.

2.)



$S_\Delta = 16\sqrt{3}\ m^2$

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

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

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

$\ell^2 = 64$

$\ell_\Delta = 8\ m$

$R_\Delta = \frac{\ell\sqrt{3}}{2}$

$R_\Delta = \frac{8\sqrt{3}}{2}$

$\boxed{R_\Delta = 4\sqrt{3} = d}$

$d = \ell\sqrt{2}$

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

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

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

$S_\square = \ell^2$

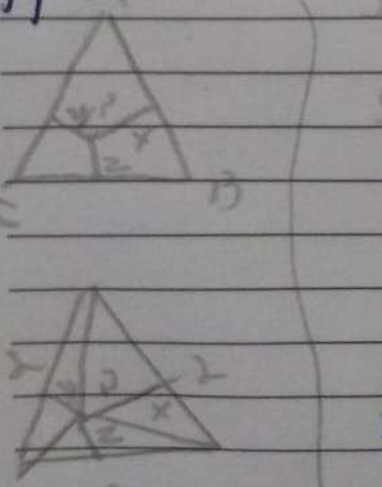
$S_\square = (2\sqrt{6})^2$

$S_\square = 4 \cdot 6$

$S_\square = 24\ m$

$\boxed{\ell_\square = 2\sqrt{6}}$

3)



$S_{APB} + S_{BPC} + S_{APC} = S_{ABC} = \sqrt{3}$

$S_{APB} = \frac{2 \cdot x}{2}$ $S_{BPC} = \frac{2 \cdot z}{2}$ $S_{APC} = \frac{2y}{2}$

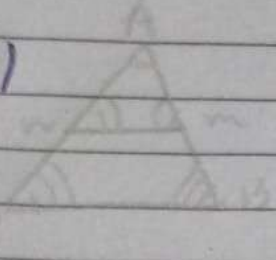
$\frac{x \cdot x}{x} + \frac{x \cdot y}{x} + \frac{x \cdot z}{x} = \sqrt{3}$

$x + z + y = \sqrt{3}$

alternativa (B)

CREATE IT.

4)



$S_{ABC} = 96\ m^2$

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

$\triangle ABC \sim \triangle AMN$

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

$S_{BMNC} - S_{AMN}$

$S_{BMNC} = 96 - \frac{1}{4} \cdot 96$

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

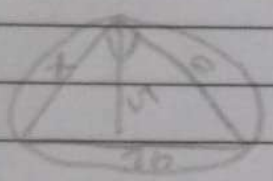
$S_{BMNC} = 96 - 24$

$\boxed{S_{AMN} = \frac{1}{4} \cdot 96\ m^2}$

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

$72\ m^2$

5)



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

$100 = 36 + x^2$

$x^2 = 64$

$x = 8$

$S_{ABC} = \frac{b \cdot h}{2}$

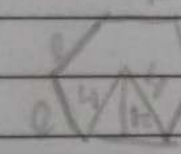
$S_{ABC} = \frac{8 \cdot 6}{2}$

$S_{ABC} = 4 \cdot 6$

alternativa [A]

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

6)



Hexágono regular inscrito na circunferência, logo: $r = l = 4$ cm

$2p = \frac{r\sqrt{3}}{2}$

$2p = \frac{4\sqrt{3}}{2}$

$2p = 2\sqrt{3}$

$S_A = \frac{4 \cdot (2\sqrt{3})}{2}$

$= 2(2\sqrt{3})$

$= 4\sqrt{3}$

quadrado

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

$\boxed{48}$