1- $\vartheta_i = 720°$

$2x = 720 - 540$

$x = \frac{180}{2} = 90$

Area total = A.1 + A.2 + A.3

$\frac{5.5}{2} + 5.5\sqrt{2} + \frac{5.5}{2}$

$\frac{25}{2} + 25\sqrt{2} + \frac{25}{2}$

$h^2 = 5^2 + 5^2$

$h^2 = 25 + 25$

$H = \sqrt{50} = 5\sqrt{2}$

↳ Area total = $25(\sqrt{2}+1)$

Alternativa E

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

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

$l^2 = \frac{16\sqrt{3}.4}{\sqrt{3}} = \sqrt{64}$

$l = 8m$

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

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

$x = 4\sqrt{3}$

$x^2 = y^2 + y^2$

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

$16.3 = 2y^2$

$y^2 = 24$

Alternativa B

3- $A.\ \Delta ABC = \frac{2^2\sqrt{3}}{4} = \sqrt{3}$

$A.\ \Delta ABC = A.\ \Delta BCP + A.\ \Delta ABP + A.\ \Delta ACP$

↳

$\sqrt{3} = \frac{2.D1}{2} + \frac{2.D2}{2} + \frac{2.D3}{2}$

$D_1 + D_2 + D_3 = \sqrt{3}$

Alternativa B

4- $\frac{A.\ \Delta AMN}{A.\ \Delta ABC} = k^2$

$\frac{A.\ \Delta AMN}{96} = \left(\frac{1}{2}\right)^2$

$A.\ \Delta AMN = \frac{96}{4} = 24$

$A.\ \square BMNC$

$A.\ \Delta ABC - A.\ \Delta AMN$

$96 - 24$

$A.\ \square BMNC = 72\ m^2$

5- Raio = 5

Diâmetro = 2.R = 10

A ΔABC = ?

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

$100 = 36 + x^2$

$x = \sqrt{64} = 8\ cm$

$\frac{A.B.C}{4.R}$

$\frac{10 \cdot 8 \cdot 6}{4 \cdot 8}$

$4 \cdot 6 = 24\ cm^2$

Alternativa A

6- $R = 4$

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

$h = 4\sqrt{3}$

Area 1 = Area 3 = x

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

$x^2 = 16 \cdot 3$

$x^2 = 48\ cm^2$

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

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