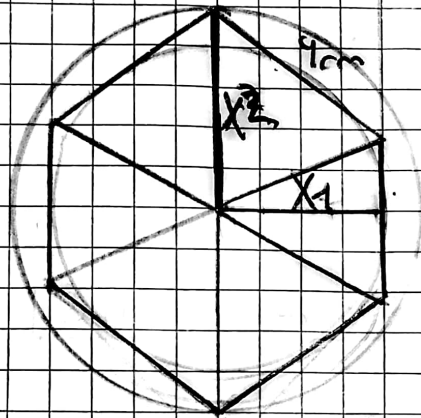
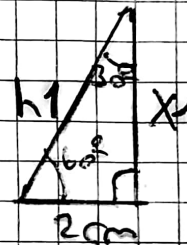
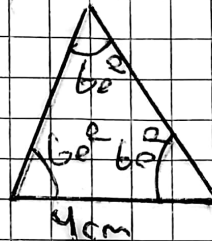


16)



$$x = 4 \text{ cm}$$



$$x = 6 \text{ cm}$$

$$\tan 60^\circ = \frac{6 \text{ cm}}{x_1}$$

$$\text{Area } 1 = \pi \cdot (6.964 \text{ cm})^2 = 12\pi$$

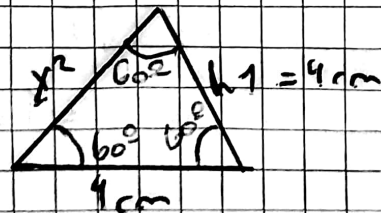
$$h_1 = \sqrt{(2)^2 + (3.464)^2}$$

$$h_1 = 3.999 = 4 \text{ cm}$$

$$\tan 60^\circ = \frac{x_1}{2 \text{ cm}}$$

$$\tan 60^\circ \cdot 2 \text{ cm} = x_1$$

$$3.464 \text{ cm} = x_1$$



$$\frac{x_2}{\sin 60^\circ} = \frac{4 \text{ cm}}{\sin 60^\circ}$$

$$x_2 = \frac{4 \text{ cm}}{\sin 60^\circ} \cdot \sin 60^\circ$$

$$x_2 = 4 \text{ cm}$$

$$\text{Area } 2 = \pi \cdot (4)^2 = 16\pi$$

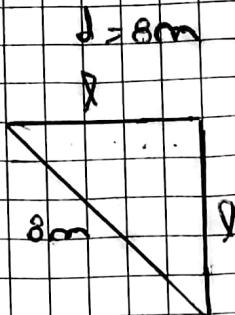
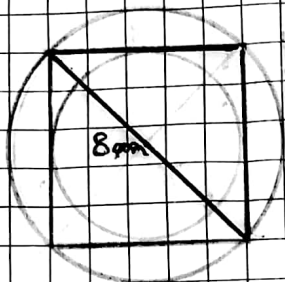
A de la corona de los círculos 1 y 2 es

$A_{\text{círculo 2}} - A_{\text{círculo 1}} = A \text{ de la corona del círculo}$

$16\pi \text{ cm}^2 - 12\pi \text{ cm}^2 = A \text{ de la corona del círculo}$

Rta: $4\pi \text{ cm}^2 = A \text{ de la corona del círculo}$

1A)



$$\begin{aligned} 8m^2 &= l^2 + l^2 \\ \frac{8m^2}{2} &= 2 \cdot l^2 \\ 4m^2 &= l^2 \end{aligned}$$

$$64m^2 = l^2 + l^2$$

$$\frac{64m^2}{2} = 2 \cdot l^2$$

$$32m^2 = 2 \cdot l^2$$

$$\sqrt{32m^2} = l$$

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

$$A_{\text{círculo 1}} = \left(\frac{4\sqrt{2}}{2}\right)^2 \pi =$$

$$A_{\text{círculo 1}} = (2\sqrt{2})^2 \pi$$

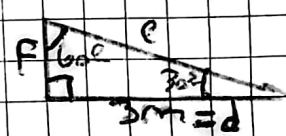
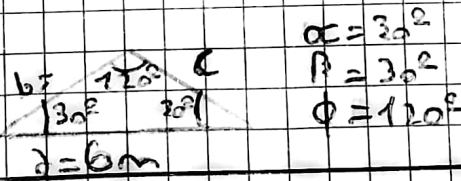
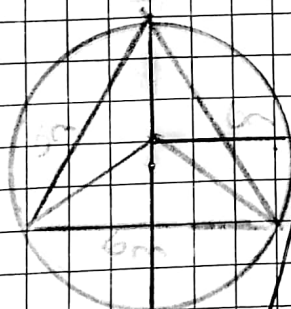
$$A_{\text{círculo 1}} = 8\pi m^2$$

$$A_{\text{círculo 2}} = 16\pi m^2$$

$$A_{\text{círculo 2}} = 16\pi m^2$$

Rta: $A \text{ de la corona} = 16\pi m^2 - 8\pi m^2 = 8\pi m^2$

2A)



$$\frac{6m}{\sin 120^\circ} = \frac{b}{\sin 30^\circ} = \frac{c}{\sin 30^\circ}$$

$$b = \frac{6m}{\sin 120^\circ} \cdot \sin 30^\circ = 2\sqrt{3}$$

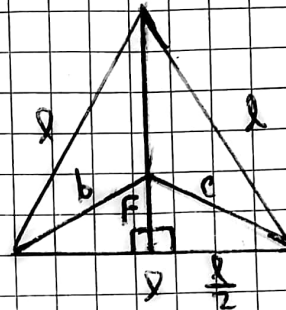
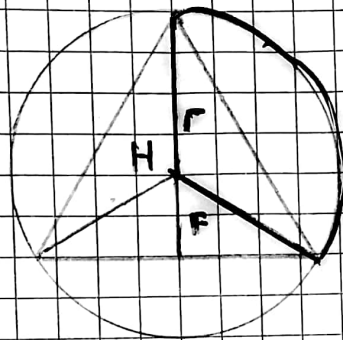
$$c = \frac{6m}{\sin 120^\circ} \cdot \sin 30^\circ = 2\sqrt{3}$$

$$\begin{aligned} a &= 9m^2 \\ b &= 6m^2 \\ c &= 2m^2 \end{aligned}$$

$$\frac{3m}{\sin 60^\circ} = \frac{F}{\sin 30^\circ} = \frac{e}{\sin 90^\circ}$$

$$F = \frac{3m}{\sin 60^\circ} \cdot \sin 30^\circ = \sqrt{3}$$

$$e = \frac{3m}{\sin 60^\circ} \cdot \sin 90^\circ = 2\sqrt{3}$$



$$r = 6m$$

$$c = 2\sqrt{3}m$$

$$l = 3m$$

$$2$$

$$F = \sqrt{3}$$

$$b = 2\sqrt{3}$$

$$r = 3\sqrt{3} - \sqrt{3} = 2\sqrt{3}$$

$$A_{\text{circulo}} = \pi \cdot (2\sqrt{3})^2 = 12\pi m^2$$

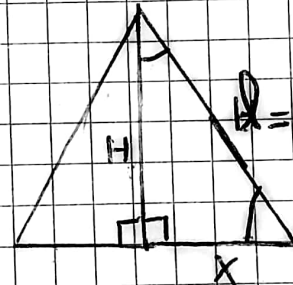
$$A_{\text{triángulo}} = (6m \times 3\sqrt{3})/2$$

$$A_{\text{triángulo}} = 9\sqrt{3} m^2$$

$$A_{\text{total}} = A_{\text{circulo}} - A_{\text{triángulo}} =$$

$$A_{\text{total}} = 12\pi - 9\sqrt{3} = \frac{22,1106 m^2}{3} = 7,3702 m^2 + \frac{9\sqrt{3}}{3} = 12,56 m^2$$

$$Rta = \text{El area del sector es } 12,56 m^2$$



$$\frac{6m}{\sin 40^\circ} = \frac{H}{\sin 60^\circ} = \frac{x}{\sin 80^\circ}$$

$$H = \frac{6m}{\sin 40^\circ} \cdot \sin 60^\circ = 3\sqrt{3}$$