



## **LA ARQUITECTURA**

**NOMBRE DEL ALUMNO:** Gari Daniel Tinajero Altúzar

**NOMBRE DEL TEMA:** CENTROS DE GRAVEDAD

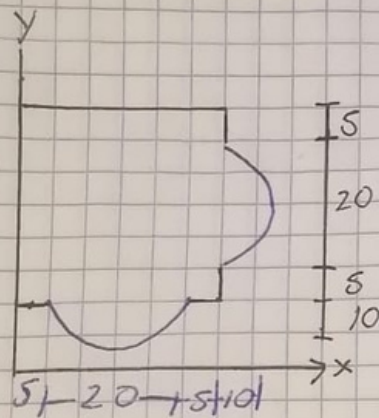
**PARCIAL:** 2

**NOMBRE DE LA MATERIA:** ESTÁTICA PARA LA ARQUITECTURA

**NOMBRE DEL PROFESOR:** PEDRO ALBERTO GARCIA LOPEZ

**LICENCIATURA:** Arquitectura

**CUATRIMESTRE:** 3



$$\textcircled{1} \quad c_x = 30/2 = 15 \text{ m}$$

$$c_y = 30/2 = 15 \text{ m} + 10 = 25$$

$$\text{Area: } L \cdot L = 30 \times 30 = 900 \text{ m}^2$$

$$c_x = 17.489$$

$$c_y = 27.5103$$

$$\textcircled{2} \quad c_y = 4R/3\pi = 3 \cdot 10 = -4.244c + 30 = 34.244$$

$$c_y = h/2 = 20/h2 = 10 \text{ cm} + 15 = 25 \text{ m}$$

$$A \pi \cdot r^2 / 2 = 157.08 \text{ m}$$

$$3 c_y = 20/2 = 10 + 5 = 15 \quad A = \pi \cdot r^2 / 2 = 157.08$$

$$c_y = 4R/3\pi = 4 \cdot 10 = -4.244 + 10 = 5.756$$

$$c_x = (900 \cdot 15) + (34.244 \cdot 157.08) + (157.08 \cdot 15)$$

$$157.08 + 157.08 \cdot 0.8 + 900$$

$$= \frac{21235.281}{1214.16}$$

$$c_y = (900 \cdot 25) + (157.08 \cdot 25) + (5.756 \cdot 157.08)$$

$$\frac{27331.15}{1214.16}$$

$$= 27331.15$$

$$\frac{27331.15}{1214.16}$$

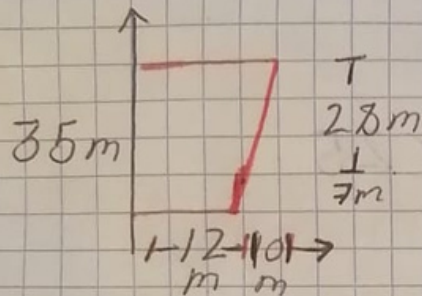
$$\textcircled{1} \quad c_x = B/2 = 12\text{m}/2 = 6\text{m}$$

$$c_y = h/2 = 35\text{m}/2 = 17.5\text{m}$$

$$\text{Area} = b \cdot h = 12 \times 35 = 420\text{m}^2$$

$$c_x = (420\text{m}^2 \cdot 6\text{m}) + (140\text{m}^2 \cdot 15.33\text{m}) =$$

$$\frac{420\text{m}^2 + 140\text{m}^2}{560} = \underline{\underline{8.33}}$$



$$\textcircled{2} \quad c_x = b/3 = 10/3 = (3.33 + 12) = 15.33$$

$$c_y = h/3 = 28/3 = (9.33 \cdot 2) + 7 = 25.6666$$

$$A = b \cdot h/2 = 10 \cdot 28/2 = 140\text{m}^2$$

$$c_y = (17.5 \cdot 420\text{m}^2) + (25.66 \cdot 140\text{m}^2) =$$

$$\frac{420\text{m}^2 + 140\text{m}^2}{560}$$

$$c_y = \frac{10943.24}{560} = \underline{\underline{19.5415}}$$