



ALUMNO(A): FANI DE LOS ÁNGELES JIMÉNEZ HERNÁNDEZ

DOCENTE: PEDRO ALBERTO GARCÍA LÓPEZ

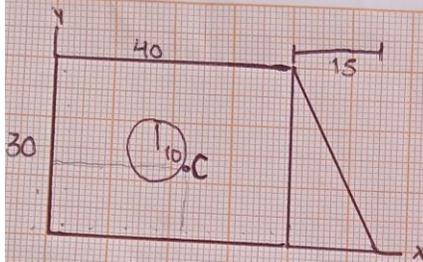
MATERIA: ESTÁTICA PARA LA ARQUITECTURA

ACTIVIDAD: CENTRO GRAVITACIONAL

CUATRIMESTRE: 3

GRUPO: LAR04EMC0121-A

LUGAR Y FECHA: COMITÁN DE DOMÍNGUEZ CHIAPAS, A; 12 DE JUNIO DE 2022



$$A_1 = 30(40) = 1,200$$

$$x_1 = \frac{40}{2} = 20 \text{ cm}$$

$$y_1 = \frac{30}{2} = 15 \text{ cm}$$

$$A_2 = 3.1416 (10)^2 = 314.16$$

$$x_2 = \emptyset$$

$$y_2 = \emptyset$$

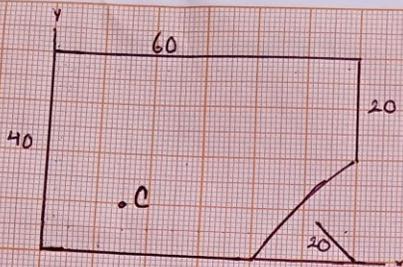
$$A_3 = \frac{15(30)}{2} = 225 \text{ cm}$$

$$x_3 = \frac{15}{3} = 5 \text{ cm}$$

$$y_2 = \frac{30}{3} = 10 \text{ cm}$$

$$C_{gx} = \frac{1200(20) - 314.16 + 225(5)}{1200 - 314.16 + 225} = 22.33$$

$$C_{gy} = \frac{1200(15) - 314.16 + 225(10)}{1200 - 314.16 + 225} = 17.94$$



$$A_1 = 60(40) = 2,400 \text{ cm}^2$$

$$x_1 = \frac{60}{2} = 30 \text{ cm}$$

$$y_1 = \frac{40}{2} = 20 \text{ cm}$$

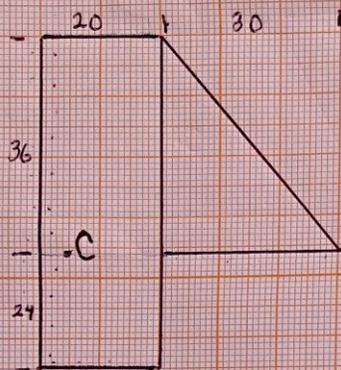
$$A_2 = \frac{3.1416(20)^2}{4} = 314.16 \text{ cm}^2$$

$$x_2 = \frac{4(20)}{3(3.1416)} = 83.776 \text{ cm}$$

$$y_2 = \frac{4(20)}{3(3.1416)} = 83.776 \text{ cm}$$

$$C_{gx} = \frac{2,400(30) - 314.16(83.776 \text{ cm})}{2,400 - 314.16} = 21.900 \text{ cm}$$

$$C_{gy} = \frac{2,400(20) - 314.16(83.776 \text{ cm})}{2,400 - 314.16} = 10.394$$



$$A_1 = 60(20) = 1200 \text{ cm}$$

$$x_1 = \frac{20}{2} = 10 \text{ cm}$$

$$y_1 = \frac{60}{2} = 30 \text{ cm}$$

$$A_2 = \frac{30(36)}{2} = 1080 \text{ cm}$$

$$x_2 = \frac{30}{3} = 10 \text{ cm}$$

$$y_2 = \frac{36}{3} = 12 \text{ cm}$$

$$C_{gx} = \frac{1200(10) + 1080(10)}{1200 + 1080} = 10 \text{ cm}$$

$$C_{gy} = \frac{1200(30) + 1080(12)}{1200 + 1080} = 21.47 \text{ cm}$$