

Mi Universidad

CENTROS DE GRAVEDAD

FERNANDA STEPHANIA RAMIREZ

GUILLÉN

Parcial 2

TEMA: Centros de Gravedad

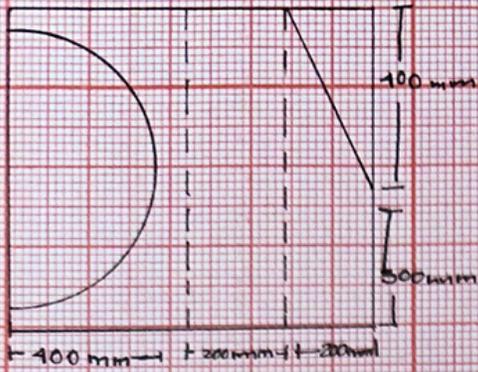
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REPORTE DE PRÁCTICA

Cuatrimestre 3°

15/06/2024

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$$A_T = 800 \text{ mm} \times 700 \text{ mm} \\ = 5,600 \text{ mm}^2$$

$$C_{gy} = \frac{700 \text{ mm}}{2} = 350 \text{ mm}$$

$$C_{gx} = \frac{800 \text{ mm}}{2} = 400 \text{ mm}$$

$$A_2 = \frac{100 \text{ mm} \times 200 \text{ mm}}{2} = 10,000 \text{ mm}^2$$

$$C_{gx_2} = \frac{200 \text{ mm}}{3} = 66.66 \text{ mm}$$

$$C_{gy_2} = \frac{100 \text{ mm}}{3} = 33.33 \text{ mm}$$

$$A_3 = \frac{\pi \cdot r^2}{2} = \frac{3.1416 \cdot 200^2}{2}$$

$$= 141,372 \text{ mm}^2$$

$$C_{gx} = 127.32 \text{ mm}$$

$$C_{gy} = 300 \text{ mm} + 100 \text{ mm} = 400 \text{ mm}$$

$$C_{gx} = \frac{5600 \text{ mm}^2(400 \text{ mm}) - 10000 \text{ mm}^2(66.66 \text{ mm}) - 141372 \text{ mm}^2(127.32 \text{ mm})}{3786.28 \text{ mm}^2} \\ = 332.028 \text{ mm}$$

$$C_{gy} = \frac{5600 \text{ mm}^2(350 \text{ mm}) - 10000 \text{ mm}^2(33.33 \text{ mm}) - 141372 \text{ mm}^2(400 \text{ mm})}{3786.28 \text{ mm}^2} \\ = 351.22 \text{ mm}$$