

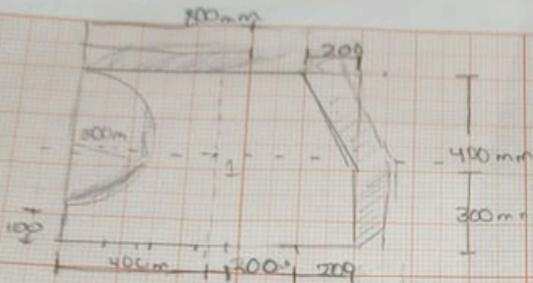
**Mi Universidad**

ERVIN ALTAMIRANO JIMENEZ

MATERIA: ESTÁTICA PARA LA ARQUITECTURA

PROFESOR: ARQ, PEDRO GARCIA LOPEZ

CUATRIMESTRE: 3RO UNIDAD 2



$$C_x = A_1 x_1 + A_2 x_2$$

$$A_1 = (800 \text{ mm}) (700 \text{ mm}) = 560,000$$

$$C_{x1} = \frac{800}{2} = 400$$

$$C_{y1} = \frac{700}{2} = 350$$

$$C_{gx} = \frac{560,000 (400) + 241,372 (672.676) + 40,000 (66.666)}{378,628}$$

$$C_{gx} = 333.403 \text{ mm}$$

$$A_2 = \frac{\pi r^2}{2} = \frac{3.1416 (300 \text{ mm})^2}{2} = 141,372$$

$$x_2 = \frac{4(300 \text{ mm})}{3(3.1416)} = 127.323 - 800 \text{ mm} = 672.676$$

$$x_2 = 300 + 100 = 400 \text{ mm}$$

$$C_{gy} = \frac{560,000 (350) - 141,372 (400 \text{ mm}) + 40,000 (133.333)}{378,628}$$

$$C_{gy} = 354.220 \text{ mm}$$

$$x_3 = \frac{200}{3} = 66.666$$

$$y_3 = \frac{400}{3} = 133.333$$