

*Nombre del docente:*

*Pedro Alberto García López*

*Nombre del alumno:*

*Reynaldo Alberto Alfonzo Pérez*

*Materia:*

*Estática de la arquitectura*

*Licenciatura:*

*Arquitectura*

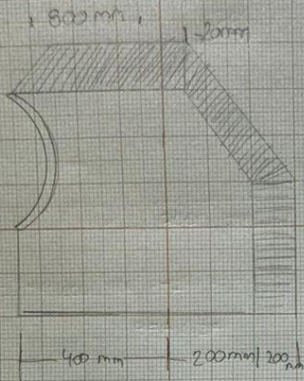
*Cuatrimestre:*

*3*

*Unidad:*

*2*





$$G_x = A_1 x_1 + A_2 x_2 + A_3 x_3$$

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

$$x_1 = \frac{800}{2} = 400$$

$$x_2 = \frac{700}{2} = 350$$

$$A_2 = \frac{\pi \cdot r^2}{4} = \frac{\pi \cdot (400 \text{ mm})^2}{4} = 141,372$$

$$G_x = 560,000(400) - 141,372(672.676) + 40,000(66.666) + 40,000(133.333) = 127,323 - 95,214 = 32,109$$

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

$$G_y = 560,000(350) - 141,372(400) + 40,000(66.666) + 40,000(133.333) = 196,000,000 - 56,548,800 + 2,666,666 + 5,333,333 = 147,441,199$$

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

$$x_3 = \frac{400}{3} = 133.333$$

$$G_y = 354,220 \text{ mm}$$