ALUMNO(A): FANI DE LOS ANGELES JIMENEZ HERNANDEZ

DOCENTE: PEDRO ALBERTO GARCIA LOPEZ

MATERIA: ESTATICA DE LA ARQUITECTURA

ACTIVIDAD: INERCIA

CUATRIMESTRE: 3

GRUPO: LAR04EMC0121-A

LUGAR Y FECHA: COMITAN DE DOMINGUEZ CHIAPAS, A; 31 DE JULIO DE 2022
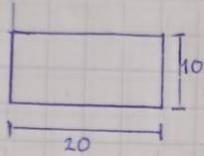
$$\overline{I}_x = \frac{20\,cm\,(10cm)^3}{12} = 1{,}666.66\,cm^4$$

$$\overline{I}_y = \frac{(20cm)^3\,10cm}{12} = 6{,}666.66\,cm^4$$
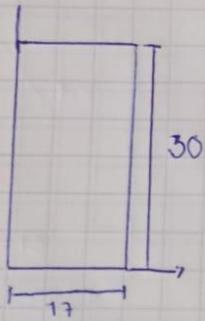
$$\overline{I}_x = \frac{17\,(30cm)^3}{12} = 38{,}250\,cm^4$$

$$\overline{I}_y = \frac{(17cm)^3\,30cm}{12} = 12{,}282.5\,cm^4$$
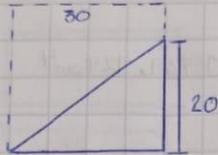
v

$$T_x = \frac{30(20)^3}{36} = 6,866.66 \text{ cm}^4$$

$$T_y = \frac{(30)^3 20 \text{ cm}}{36} = 15,000 \text{ cm}^4$$

$$\bar{T}_x = \bar{T}_y = \frac{3.1416(7.5 \text{ cm})^4}{4} = 2,485.054 \text{ cm}^4$$
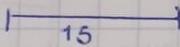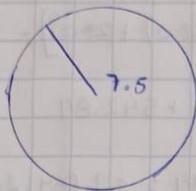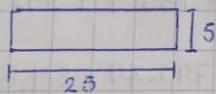
$$T_x = \frac{25 \text{ cm}(5 \text{ cm})^3}{12} = 260.41 \text{ cm}^4$$

$$T_x = \frac{(25 \text{ cm})^3 \, 5 \text{ cm}}{12} = 6,510.41 \text{ cm}^4$$
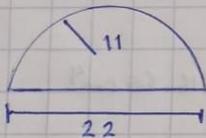

$$\bar{T}_x = 0.1098(11)^4 = 1,607.5818 \text{ cm}^4$$
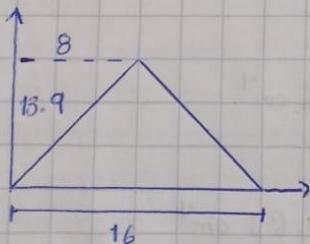
$$\bar{T}_x = \frac{16(13.9)^3}{36} = 1,193.608 \text{ cm}^4$$

$$T_y = \frac{(16)^3 13.9}{48} = 1,186.133 \text{ cm}^4$$
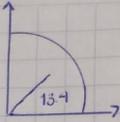
$$\overline{I}_x = \overline{I}_y = 0.05488\,(13.4)^4 = 1,769.429\,cm^4$$
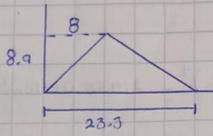
$$\overline{I}_y = \frac{23.3\,(8.9\,cm)}{3}\left[(8)^2 - (8)(23.3) + 23.3^5\right] =$$

$$69.12\,cm \quad 64 - 186.4 + 542.89$$

$$69.12\,cm \quad \times \quad 420.49 = 29,064.26\,cm^2$$

$$\overline{I}_y = \frac{23.3\,(8.9\,cm)}{3}\left[(8)^2 + (8)(23.3) + (23.3)^5\right] =$$

$$69.12\,cm \quad 64 + 186.4 + 542.89$$

$$69.12\,cm \quad \times \quad 793.29 = 54,882.20\,cm^2$$
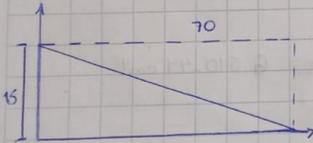
$$\overline{I}_x = \frac{70(15)^3}{36} = 6,662.5\,cm^4$$

$$\overline{I}_y = \frac{(70)^3\,15}{36} = 142,916.66\,cm^4$$
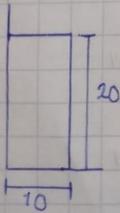
$$\overline{I}_x = \frac{10\,cm\,(20)^3}{12} = 6,666.66\,cm^4$$

$$\overline{I}_y = \frac{(10\,cm)^3\,20\,cm}{12} = 1,666.66\,cm^4$$