UDS

Universidad Del Sureste

Nombre De Los Alumnos: Antonio De Jesús Lopez Lopez

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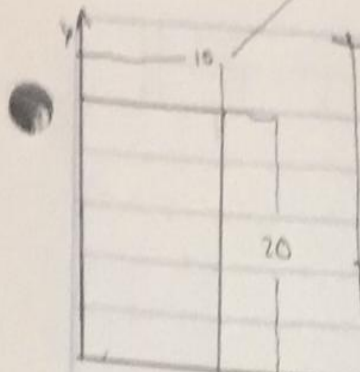**Nombre De La Materia:** Estática En La Arquitecturas

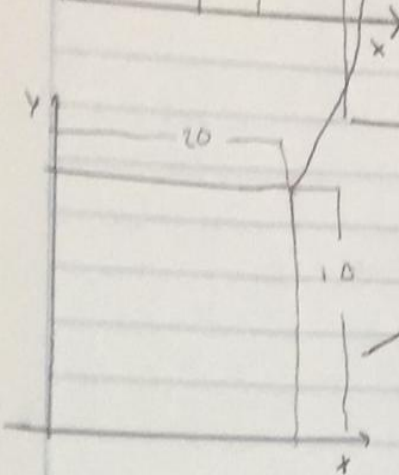**Nombre De La Actividad:** Problemas

Carrera: Arquitectura
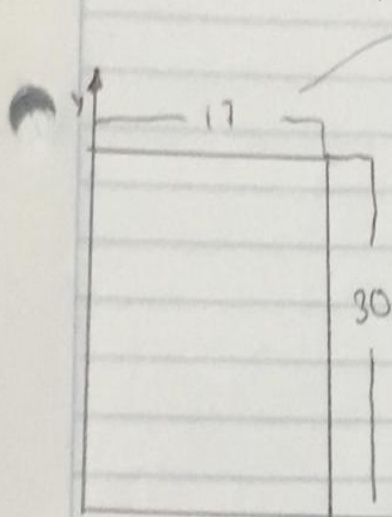
Grado: 3er Cuatrimestre

Fecha: 29 De Julio Del 2022

$$I_x = \frac{10\ cm\ (20cm)^3}{12} = \frac{80,000}{12} = 6,666.66$$

$$I_y = \frac{(10cm)^3\ (20\ cm)}{12} = \frac{20,000}{12} = 1,666.66\ cm^4$$

$$I_x = \frac{20\ cm\ (10cm)^3}{12} = \frac{20000}{12} = 1,666.66\ cm^4$$

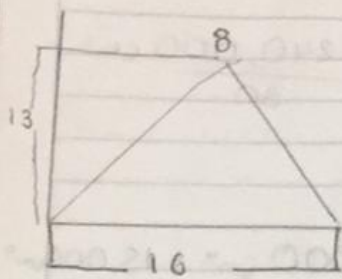$$I_y = \frac{(20cm)^3\ 10cm}{12} = \frac{80,000}{12} = 6,666.66\ cm^4$$

$$I_x = \frac{17\ cm\ (30cm)^3}{12} = \frac{459.000}{12} = 38,250$$

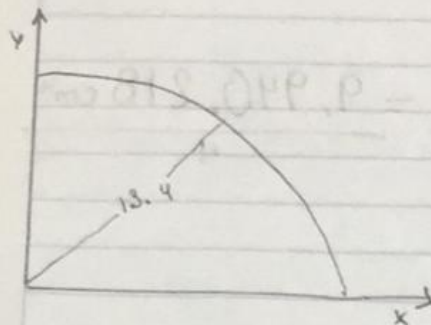$$I_y = \frac{(17\ cm)^3\ 30cm}{12} = \frac{147,340}{12}\ cm^4$$

$$= 12,282.50\ cm^4$$

$$I_y = \frac{16\,cm\,(13.9\,cm)^3}{36} = \frac{42,969.90\,cm^4}{36}$$

$$= 1,193.608\,cm^4$$

$$I_y = \frac{(16\,cm)^3\,134\,cm}{48} = \frac{54,93.40\,cm}{48}$$

$$= 1186.133\,cm^4$$

$$I_x = I_y = 0.052188\,(13.4\,cm)^4$$

$$= 1769.4246\,cm^4$$

$$I_x = \frac{23.3\,cm\,(8.9\,cm)^3}{36} = \frac{16,425.77}{36}$$

$$= 456.271\,m^4$$

$$I_y = 23.3\,cm\,(3.8)\,(8\,cm)^2 - (8\,cm \times 23.3\,cm) + 23.3$$

$$= 29.513\,cm^2\,(64\,m^2 - 186.4\,cm^2 + 542.84\,cm^2)$$

$$= 29.513\,cm^2\,(420.49\,cm^2)$$

$$I_x = 12,409,921\,cm^4$$

$$I_y = 23,412.367\,cm^4$$
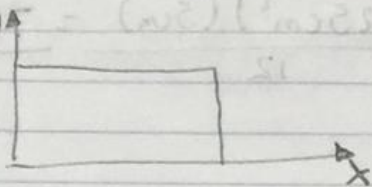
$$I_y = \frac{b^3 h}{36}$$

$$I_x = \frac{70\,cm\,(15\,cm)^3}{36} = \frac{236,250\,cm^4}{36}$$

$$= 6,562.50\,cm^4$$

$$I_y = \frac{(70\,cm)^3\,15\,cm}{36} = \frac{5,145,000\,cm^4}{36} = 142,916.66$$
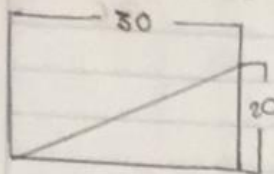
$$Tx = \frac{30cm (20cm)^3}{36} = \frac{240,000\ cm^4}{30}$$

$$= 6666.66\ cm^4$$

$$Ty = \frac{(30cm)^3\ 20cm}{36} = \frac{540,000\ cm^4}{36} = 15,000\ cm^4$$
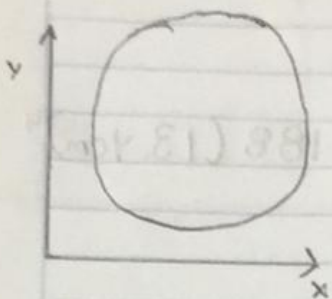
$$ly = ly = \frac{\pi R4}{4}$$

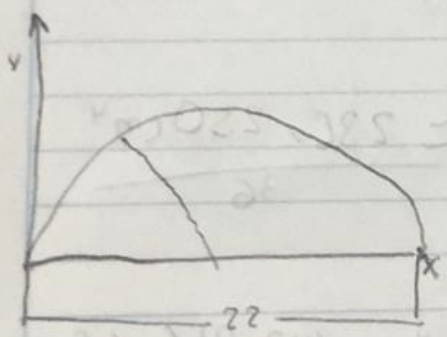$$= \frac{3.1416\ cm (7.5cm)^4}{4} = \frac{9,940.218\ cm^4}{4}$$

$$= 2,485.054\ cm^4$$
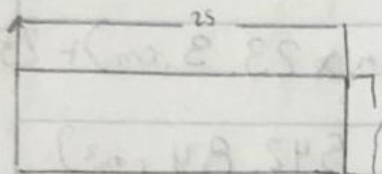
$$Iy = \frac{25cm (5cm)^3}{12} = \frac{3125\ cm^4}{12}$$

$$= 260.416\ cm^4$$

$$Iy = \frac{(25cm^3)(5cm)}{12} = \frac{78,125\ cm^4}{12} = 6.510.41\ cm$$

$$Ix = 6.10\ 98\ (12)^4 = 1607.58\ cm$$