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DOCENTE: Pedro Alberto García López

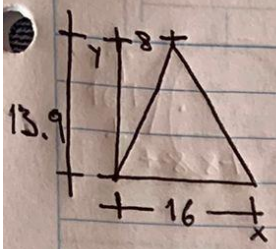
MATERIA: Estática para la arquitectura

ACTIVIDAD: 1

CUATRIMESTRE: 3er Cuatrimestre

GRUPO: LAR04EMC0121-A

LUGAR Y FECHA: Comitán de Domínguez, chis. 31/07/22

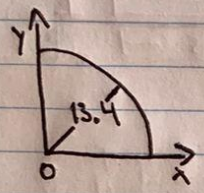


$$I_x = \frac{16\ cm\ (13.9\ cm)^3}{36} = \frac{42,969.90\ cm^4}{36}$$

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

$$I_y = \frac{(16\ cm)^3\ 13.9\ cm}{48} = \frac{59.934.40\ cm^4}{48}$$

$$= 1,186.133\ cm^4$$

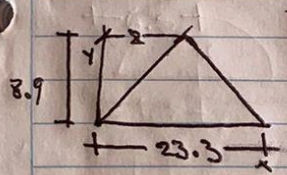


$$I_x = I_y = 0.052188\ (13.4\ cm)^4$$

$$= 1,769.4246\ cm^4$$

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

$$= 456.271\ cm^4$$



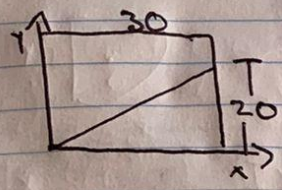
$$I_x = \frac{23.3\ cm\ (3.8\ cm)}{3}\ [(8\ cm)^2 - (8\ cm \times 23.3\ cm) +$$

$$(23.3) = 29.613\ cm\ (64\ m^2 - 186.4\ cm^2 +$$

$$542.89\ cm^2) = 29.613\ cm^2\ (426.49\ cm^2)$$

$$I_y = 12,409.921\ cm^4$$

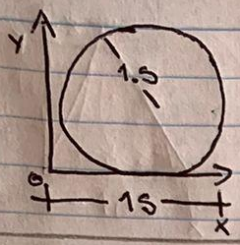
$$I_y = 23,412.367\ cm^4$$



$$I_x = \frac{30\ cm\ (20\ cm)^3}{36} = \frac{240,000\ cm^4}{36}$$

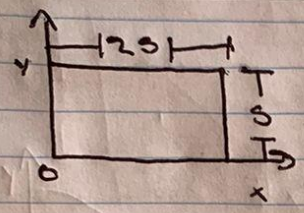
$$= 6,666.66\ cm^4$$

$$I_y = \frac{(30\ cm)^3\ 20\ cm}{36} = \frac{540.000\ cm^4}{36} = 15,000\ cm^4$$



$$\frac{3.1416\,(7.6\text{ cm})^4}{4} = \frac{9,946.218\text{ cm}^4}{4}$$

$$= 2,485.054\text{ cm}^4$$

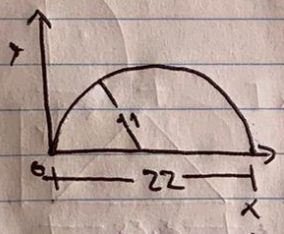


$$I_x = \frac{25\text{ cm}(5\text{cm})^3}{12} = \frac{3,125\text{ cm}^4}{12}$$

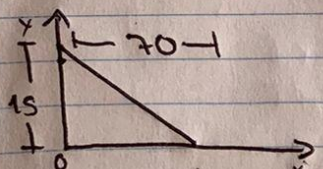
$$= 260.416\text{ cm}^4$$

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

$$= 6,510.41\text{ cm}^4$$



$$I_x = 0.1698\,(11\text{cm})^4 = 1607.68\text{ cm}^4$$

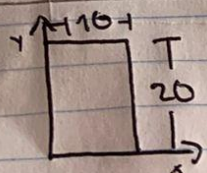


$$I_x = \frac{70\text{ cm}(15\text{cm})^3}{36} = \frac{236,250\text{ cm}^4}{36}$$

$$= 6,562.50\text{ cm}^4$$

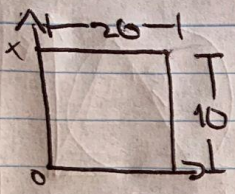
$$I_y = \frac{(70\text{cm})^3\,15\text{cm}}{36} = \frac{5,145.000\text{ cm}^4}{36}$$

$$= 142,916.66\text{ cm}^4$$



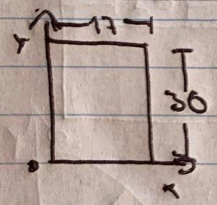
$$I_x = \frac{10\text{ cm}(20\text{cm})^3}{12} = \frac{80,000}{12} = 6,666.66\text{ cm}^4$$

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



$$I_x = \frac{20\,cm\,(16\,cm)^3}{12} = \frac{20{,}000}{12} = 1{,}666.66\,cm^4$$

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



$$I_x = \frac{17\,cm\,(30\,cm)^3}{12} = \frac{459{,}000\,cm^4}{12}$$

$$= 38{,}250\,cm^4$$

$$I_y = \frac{(17\,cm)^3\,30\,cm}{12} = 147{,}390\,cm^4$$

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