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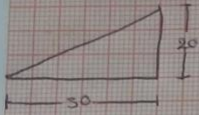
**MATERIA: Estadística para la arquitectura**

**ACTIVIDAD: Ejercicios**

**PASIÓN POR EDUCAR**

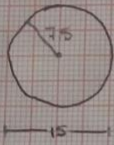
**CUATRIMESTRE: 3**

**GRUPO: Arquitectura**



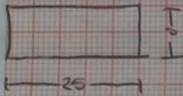
$$I_x = \frac{30(20)^3}{36} = \frac{240,000 \text{ cm}^4}{36} = 6666.66 \text{ cm}^4$$

$$I_y = \frac{(30)^3 20}{36} = \frac{540,000 \text{ cm}^4}{36} = 15000 \text{ cm}^4$$

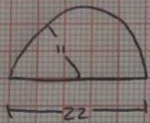


$$I_y = \frac{3.14(6(7.5)^4)}{4} = \frac{9,940.218 \text{ cm}^4}{4} = 2485.054 \text{ cm}^4$$

$$I_y = \frac{25(5)^3}{12} = \frac{3125 \text{ cm}^4}{12} = 260.416 \text{ cm}^4$$

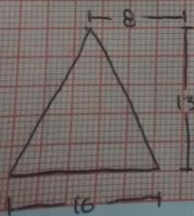


$$\frac{(25)(5)^3}{12} = \frac{78125 \text{ cm}^4}{12} = 6510.41 \text{ cm}^4$$



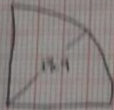
$$I_x = 6.1098(11)^4 = 1607.58 \text{ cm}^4$$

$$I_x = \frac{16(13.9)^3}{36} = \frac{41,969.90 \text{ cm}^4}{36} = 1193.608 \text{ cm}^4$$



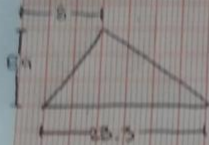
$$I_y = \frac{(16)^3 13.9}{48} = \frac{59,934.40 \text{ cm}^4}{48} = 1186.133 \text{ cm}^4$$

$$I_x = I_y = 0.54188 (13.4 \text{ cm})^4 = 1769.4246 \text{ cm}^4$$



$$I_x = \frac{23.3(8.9)^3}{36} = \frac{16425.77}{36} = 459.271 \text{ cm}^4$$

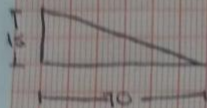
$$I_y = \frac{23.3(3.8)}{3} [(8)^2 - (8 \cdot 23.8) + (23.3)] = 29.213 \text{ cm}^2 (420.49)$$



$$I_y = 12409.921 \text{ cm}^4$$

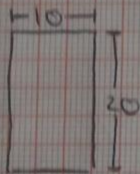
$$I_y = 23412.367 \text{ cm}^4$$

$$I_x = \frac{70(15)^3}{12} = \frac{236250}{12} = 6562.50 \text{ cm}^4$$



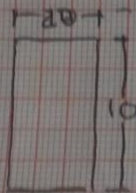
$$I_y = \frac{(70)^3 15}{36} = \frac{5145000}{36} = 142916.666 \text{ cm}^4$$

$$I_x = \frac{10(20)^3}{12} = \frac{80000}{12} = 6666.66 \text{ cm}^4$$

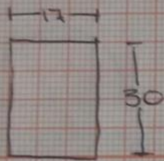


$$I_y = \frac{(10)^3 20}{12} = \frac{20000}{12} = 1666.66 \text{ cm}^4$$

$$I_x = \frac{20(10)^3}{12} = \frac{20000}{12} = 1666.66 \text{ cm}^4$$



$$I_y = \frac{(20)^3 10}{12} = \frac{80000}{12} = 6666.66 \text{ cm}^4$$



$$I_x = \frac{17(30)^3}{12} = \frac{450000}{12} = 38250 \text{ cm}^4$$

$$I_y = \frac{(17)^3 30}{12} = \frac{147390}{12} = 12282,50 \text{ cm}^4$$