

$$A_1 = 100 \cdot 10 \text{ mm}^2 = 10 \text{ cm}^2$$

$$A_2 = 80 \cdot 10 \text{ mm}^2 = 8 \text{ cm}^2$$

$$A_3 = 100 \cdot 10 \text{ mm}^2 = 10 \text{ cm}^2$$

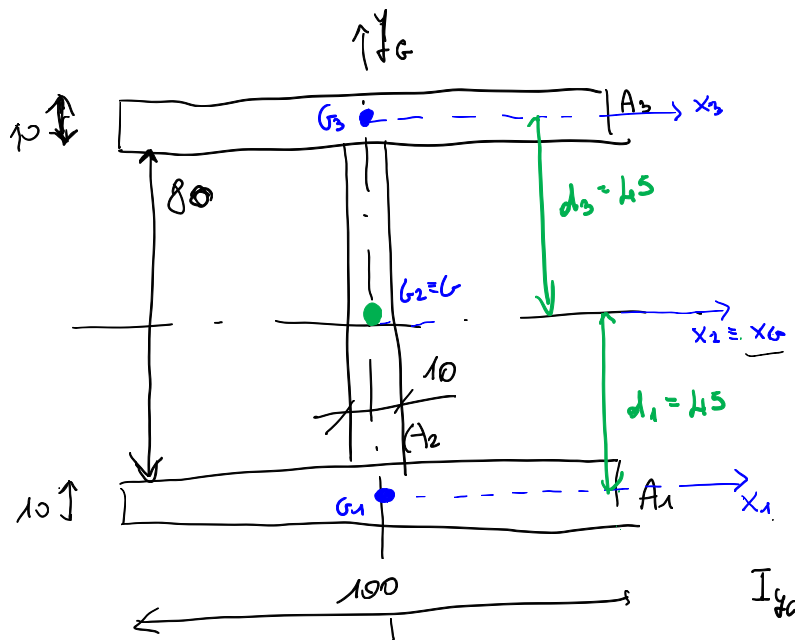
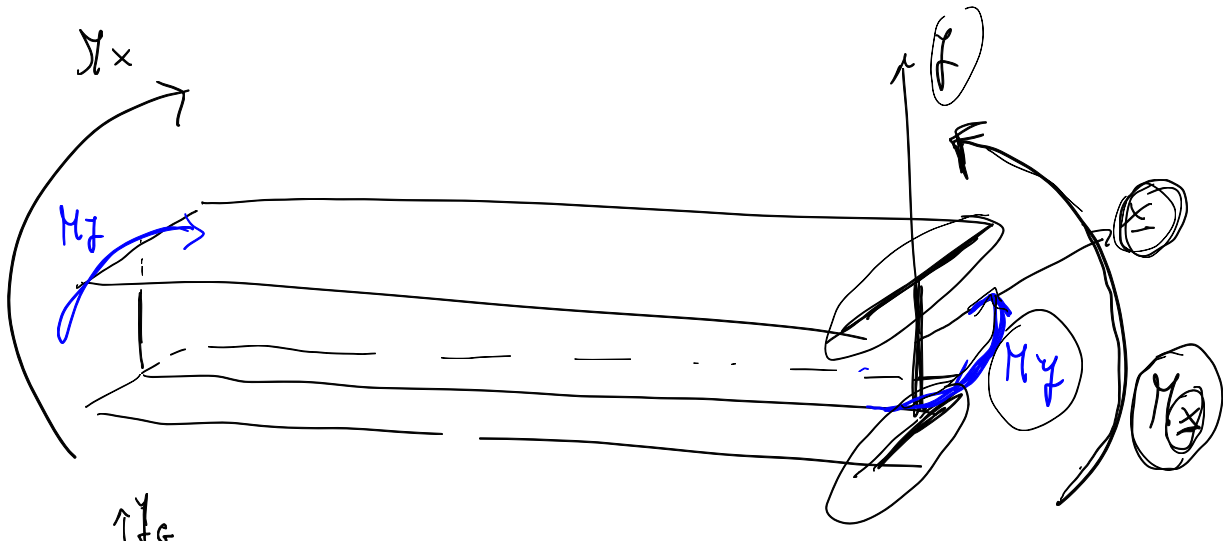
$$\begin{cases} I_{x1/A1} = \frac{bh^3}{12} = \frac{10 \cdot 1^3}{12} \text{ cm}^4 = 0.83 \text{ cm}^4 \\ I_{x2/A2} = \frac{bh^3}{12} = \frac{1 \cdot 8^3}{12} \text{ cm}^4 = 42.7 \text{ cm}^4 \\ I_{x3/A3} = \frac{bh^3}{12} = \frac{10 \cdot 1^3}{12} \text{ cm}^4 = 0.83 \text{ cm}^4 \end{cases}$$

$$\begin{cases} A_1 \cdot d_1^2 = 10 \cdot 45^2 \text{ cm}^4 = 202.5 \text{ cm}^4 \\ A_2 \cdot d_2^2 = 0 \\ A_3 \cdot d_3^2 = 10 \cdot 45^2 \text{ cm}^4 = 202.5 \text{ cm}^4 \end{cases}$$

$$I_{xG/A} = I_{x1/A1} + A_1 d_1^2 + I_{x2/A2} + I_{x2/A3} + A_3 d_3^2 =$$

$$= (0.83 + 202.5 + 42.7 + 0.83 + 202.5) \text{ cm}^4 = 449 \text{ cm}^4$$

$$A = A_1 + A_2 + A_3$$

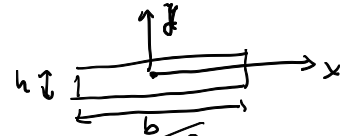


$$I_{yG/A} = I_{y1/A1} + I_{y2/A2} + I_{y3/A3}$$

$$y_1 = y_2 = y_3 = y_0$$

⇒ Now no transport

$$I_y = \frac{b^3 h}{12}$$



$$I_x = \frac{bh^3}{12}$$

$$I_y = \frac{b^3 h}{12}$$

$$I_{yG/A} = \frac{10^3 \cdot 1}{12} + \frac{1^3 \cdot 8}{12} + \frac{10^3 \cdot 1}{12} = 167 \text{ cm}^4$$