

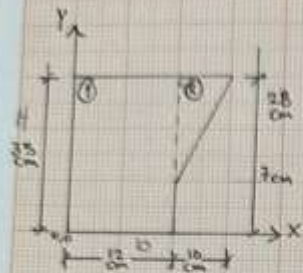


Nestor Iván Guillen Velasco

Arq, pedro

Estatica

12/06/2023



$$Cx_1 = \frac{b}{2} = \frac{25}{2} = 12.5$$

$$Cy_1 = \frac{h}{2} = \frac{28}{2} = 14$$

$$A_1 = 25(28) = 700 \text{ cm}^2$$

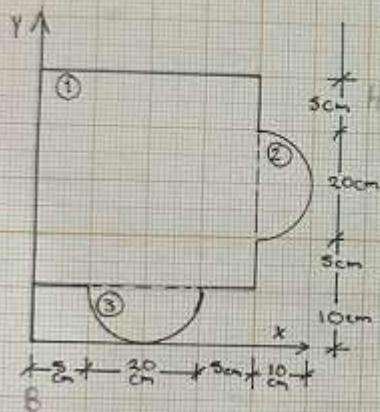
$$Cx_2 = \frac{b}{3} = \frac{10}{3} = 3.33 + 25 = 28.33$$

$$Cy_2 = \frac{h}{3} = \frac{7}{3} = 2.33 + 28 = 30.33$$

$$A_2 = \frac{b \cdot h}{2} = 35 \text{ cm}^2$$

$$Cx = \frac{[(12.5) 700] + [(28.33) 35]}{700 + 35} = 12.5 \text{ cm}$$

$$Cy = \frac{[(14) 700] + [(30.33) 35]}{700 + 35} = 14.5 \text{ cm}$$



$$A_1 = 900$$

$$Cx_1 = \frac{b}{2} = \frac{30}{2} = 15$$

$$Cy_1 = \frac{h}{2} = \frac{25}{2} = 12.5$$

$$Cx_2 = \frac{4r}{3\pi} = \frac{4 \cdot 5}{3\pi} = 2.12 + 30 = 32.12$$

$$Cy_2 = \frac{b}{2} = \frac{20}{2} = 10 + 15 = 25$$

$$Cx_3 = \frac{4r}{3\pi} = \frac{4 \cdot 5}{3\pi} = 2.12 + 5 = 7.12$$

$$Cy_3 = \frac{h}{2} = \frac{10}{2} = 5$$

$$A_3 = 157.08$$

$$A_2 = 157.08$$

$$Cx = \frac{(15 \cdot 900) + (32.12 \cdot 157.08) + (7.12 \cdot 157.08)}{900 + 157.08 + 157.08} = 16.747$$

$$Cy = \frac{(12.5 \cdot 900) + (25 \cdot 157.08) + (5 \cdot 157.08)}{900 + 157.08 + 157.08} = 12.4125$$