

$$C_{x1} = b/2$$

$$12/2 = 6 \text{ cm}$$

$$C_{y1} = h/2$$

$$35/2 = 17.5 \text{ cm}$$

$$A_1 = b \cdot h$$

$$12 \text{ cm} \cdot 35 \text{ cm} = 420 \text{ cm}^2$$

$$C_{x2} = b/3$$

$$10/3 = 3.33 \text{ cm} + 12 \text{ cm} = 15.33 \text{ cm}$$

$$C_{y2} = h/3$$

$$28/3 = 9.33 \text{ cm} \cdot 2 = 18.66 \text{ cm} + 7 \text{ cm}$$

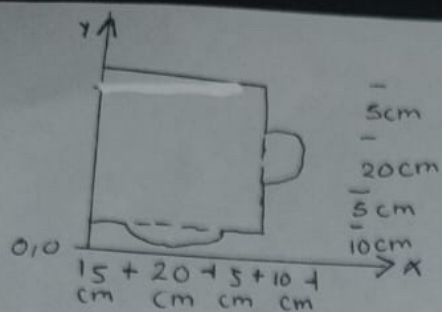
$$= 25.66 \text{ cm}$$

$$A_2 = \frac{b \cdot h}{2}$$

$$\frac{10 \times 28}{2} = 140 \text{ cm}^2$$

$$C_x = \frac{(420 \text{ cm}^2 \cdot 17.5 \text{ cm}) + (140 \text{ cm}^2 \cdot 15.33 \text{ cm})}{(420 \text{ cm}^2 + 140 \text{ cm}^2)} = 8.33 \text{ cm}$$

$$C_y = \frac{(420 \text{ cm}^2 \cdot 17.5 \text{ cm}) + (140 \text{ cm}^2 \cdot 25.66 \text{ cm})}{(420 \text{ cm}^2 + 140 \text{ cm}^2)} = 19.54 \text{ cm}$$



$$C_{x1} = b/2$$

$$30/2 = 15 \text{ cm}$$

$$C_{y1} = h/2$$

$$30/2 = 15 \text{ cm} + 10 \text{ cm} = 25 \text{ cm}$$

$$A_1 = 30 \text{ cm} \cdot 30 \text{ cm} = 900 \text{ cm}^2$$

$$C_{x2} = \frac{4R}{3\pi} = \frac{4(10)}{3\pi} = 4.244 + 30 \text{ cm}$$

$$= 34.244 \text{ cm}$$

$$C_{y2} = h/2$$

$$20/2 = 10 \text{ cm} + 15 \text{ cm} = 25 \text{ cm}$$

$$A_2 = \frac{\pi \cdot 40^2}{2} = 157.08 \text{ cm}^2$$

$$C_{x3} = 20/2 = 10 + 5 = 15 \text{ cm}$$

$$C_{y3} = 10 - 4.244 = 5.756 \text{ cm}^2$$

$$A_3 = 157.08 \text{ cm}^2$$

$$C_x = \frac{(900 \text{ cm}^2 \cdot 15 \text{ cm}) + (157.08 \text{ cm}^2 \cdot 25 \text{ cm}) + (157.08 \cdot 15 \text{ cm})}{(900 \text{ cm}^2 + 157.08 \text{ cm}^2 + 157.08 \text{ cm}^2)} = 17.48 \text{ cm}$$

$$C_y = \frac{(900 \text{ cm}^2 \cdot 25 \text{ cm}) + (157.08 \text{ cm}^2 \cdot 25 \text{ cm}) + (5.756 \text{ cm})}{(900 \text{ cm}^2 + 157.08 \text{ cm}^2 + 157.08 \text{ cm}^2)} = 22.50 \text{ cm}$$