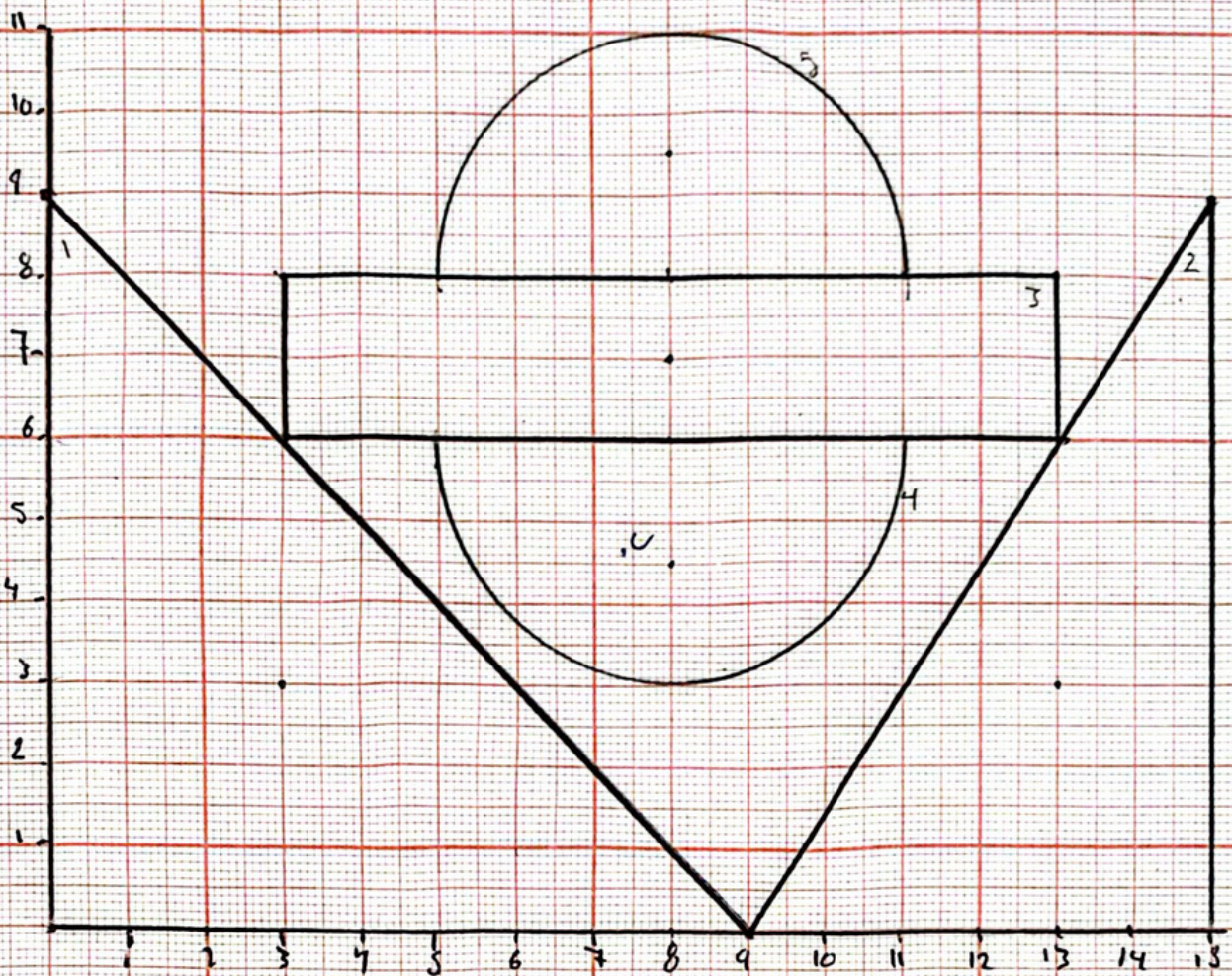


CENTROIDES DE MASA

ESTATICA I

JACINTO LOPEZ GOMEZ



Centroides

Fig. (3,3)

$$Fig. 1 = \frac{b \times h}{2} = \frac{9 \times 9}{2} = 40.5 \text{ U}^2$$

Fig. (13,3)

$$Fig. 2 = \frac{b \times h}{2} = \frac{6 \times 9}{2} = 27 \text{ U}^2$$

Fig. (8,7)

$$Fig. 3 = L \times h = 2 \times 10 = 20 \text{ U}^2$$

Fig. (8,4.5)

$$Fig. 4 = \frac{\pi \times R^2}{2} = \frac{3.1416 \times (3)^2}{2} = 14.137 \text{ U}^2$$

Fig. (8,9.5)

$$Fig. 5 = \frac{\pi \times R^2}{2} = \frac{3.1416 \times (3)^2}{2} = 14.137 \text{ U}^2$$

X-centroide

$$\frac{(3 \times 40.5) + (13 \times 27) + (8 \times 20) + (8 \times 14.137) + (8 \times 14.137)}{40.5 + 27 + 20 + 14.137 + 14.137}$$

$$x = 7.4$$

Y-centroide

$$\frac{(3 \times 40.5) + (3 \times 27) + (7 \times 20) + (4.5 \times 14.137) + (9.5 \times 14.137)}{40.5 + 27 + 20 + 14.137 + 14.137}$$

$$y = 4.6$$