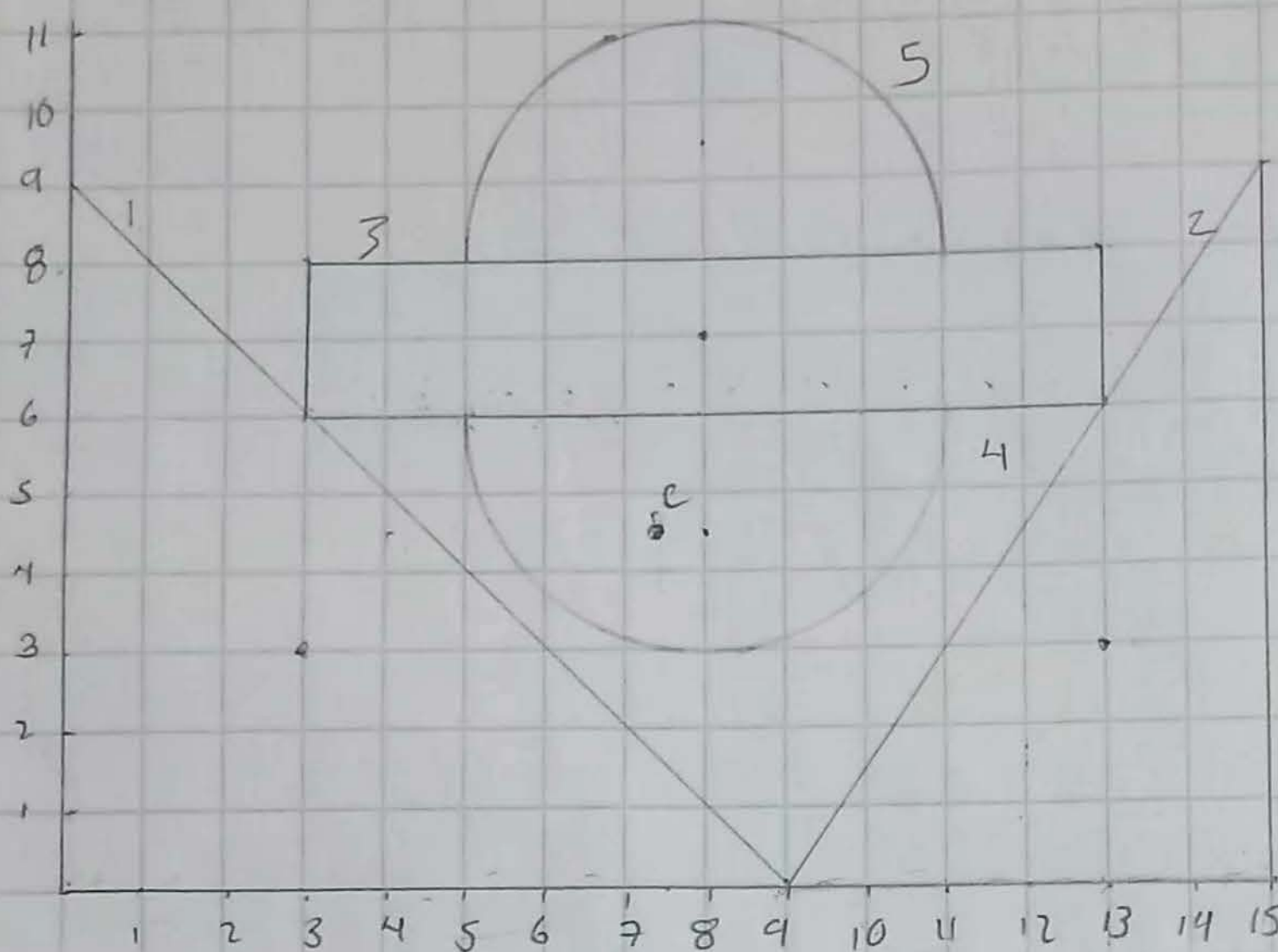




Centroides

$$F1 = 3,3$$

$$F2 = 13,3$$

$$F3 = 8,7$$

$$F4 = 8,9,5$$

$$F5 = 8,4,5$$

Areas

$$F1 = \frac{B \times h}{2} = \frac{9 \times 9}{2} = 40,5$$

$$F2 = \frac{B \times h}{2} = \frac{6 \times 9}{2} = 27$$

$$F3 = B \times h = 10 \times 2 = 20$$

$$F4 = \frac{\pi \times r^2}{2} = 14,13$$

$$F5 = \frac{\pi \times r^2}{2} = 14,13$$

Centroide x =

$$\frac{(40,5 \cdot 3) + (27 \cdot 13) + (20 \cdot 8) + (14,13 \cdot 8) + (14,13 \cdot 8)}{40,5 + 27 + 20 + 14,13 + 14,13}$$

$$= \frac{858,58}{115,76} = \underline{\underline{7,4}}$$

Centroide y =

$$\frac{(40,5 \cdot 3) + (27 \cdot 3) + (20 \cdot 7) + (14,13 \cdot 9,5) + (14,13 \cdot 4,5)}{40,5 + 27 + 20 + 14,13 + 14,13}$$

$$= \frac{546,32}{115,76} = \underline{\underline{4,6}}$$