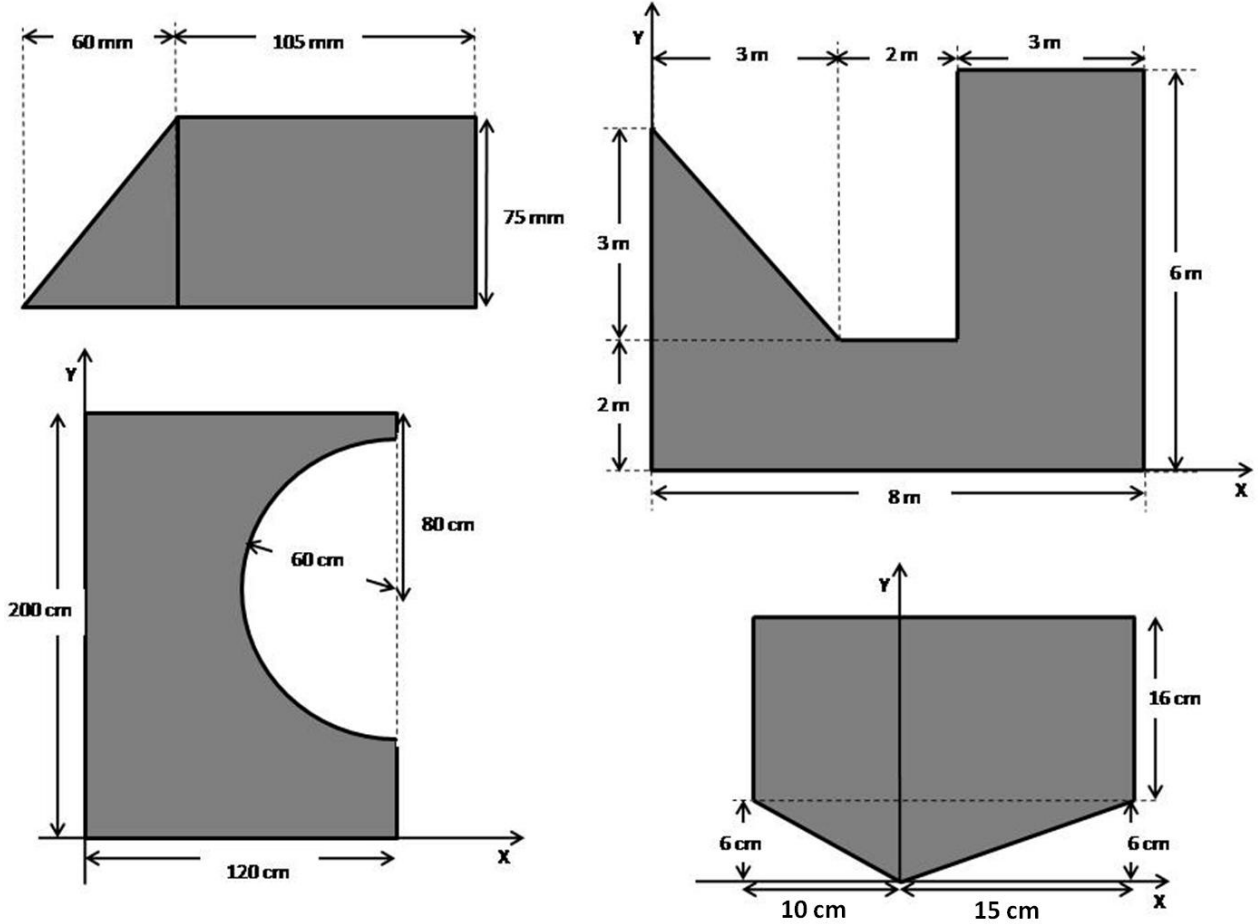


Guía extra: Centroide

(ARQUITECTURA)

Problema 1. Calcular la ubicación del centroide de cada una de las figuras que se presentan a continuación:



Problema 2. Calcular e indicar gráficamente la posición el centro de masa de los siguientes sistemas, considere que los cuerpos son homogéneos.

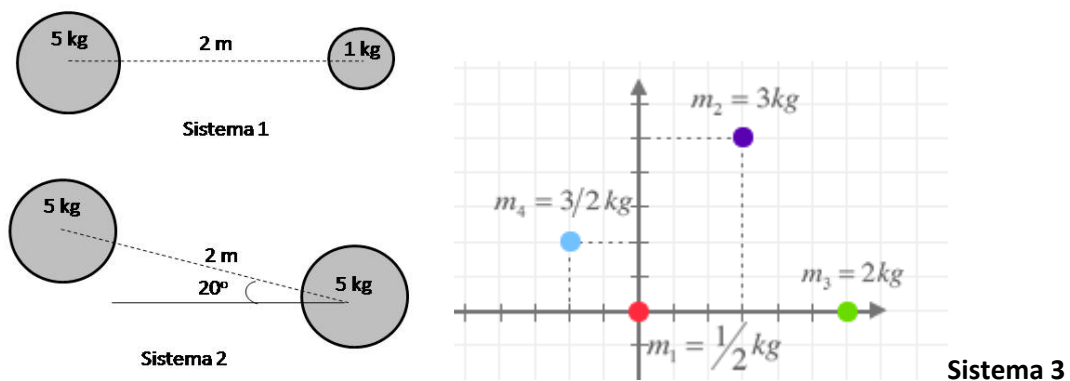
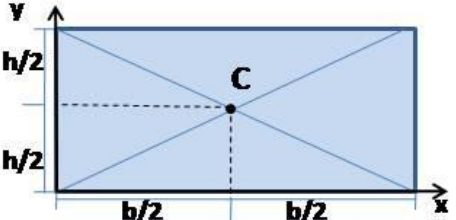
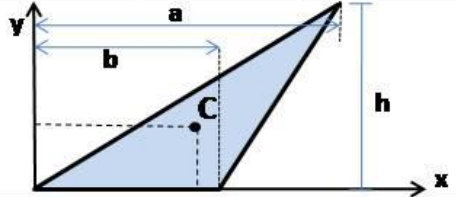
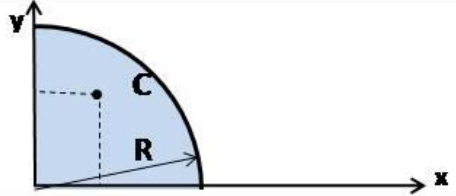
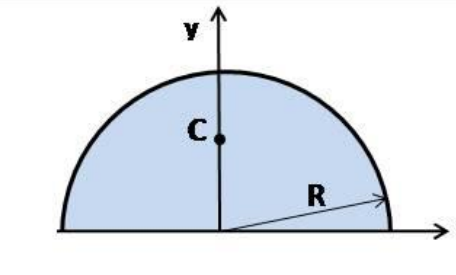


Tabla de centroides para figuras simples

| Forma | | x | y | Área |
|-------------------------|--|------------|------------|------------------|
| rectangular |  | $b/2$ | $h/2$ | $b \times h$ |
| Triangular |  | $(a+b)/3$ | $h/3$ | $(b \times h)/2$ |
| Cuarto de área circular |  | $4R/3 \pi$ | $4R/3 \pi$ | $\pi R^2/4$ |
| área semicircular |  | 0 | $4R/3 \pi$ | $\pi R^2/2$ |