The centroid of a semicircle of radius R is given by

$$\bar{x} = \frac{2R}{\pi}.$$

The centroids of several common laminas bounded by the following curves along the nonsymmetrical axis are summarized in the following table.

lamina	$\bar{y}$
circular sector	$\frac{4R\sin\left(\frac{1}{2}\theta\right)}{3\theta}$
circular segment	$\frac{4R\sin^3\left(\frac{1}{2}\theta\right)}{3(\theta-\sin\theta)}$
isosceles triangle	$\frac{1}{3}h$
parabolic segment	$\frac{2}{5}h$
semicircle	$\frac{4R}{3\pi}$

In three dimensions, the mass of a solid with density function $\rho(x, y, z)$ is

$$M = \iiint \rho(x, y, z)\, dV,$$

and the coordinates of the center of mass are

$\bar{x}$	=	$\frac{\iiint x\,\rho(x, y, z)\, dV}{M}$
$\bar{y}$	=	$\frac{\iiint y\,\rho(x, y, z)\, dV}{M}$
$\bar{z}$	=	$\frac{\iiint z\,\rho(x, y, z)\, dV}{M}.$

solid	$\bar{z}$
cone	$\frac{1}{4} h$
conical frustum	$\frac{h\left(R_1^2+2 R_1 R_2+3 R_2^2\right)}{4\left(R_1^2+R_1 R_2+R_2^2\right)}$
half-ellipsoid	$\frac{3}{16} a$, $\frac{3}{16} b$, $\frac{3}{16} c$
hemisphere	$\frac{3}{8} R$
paraboloid	$\frac{2}{3} h$
pyramid	$\frac{1}{4} h$
spherical cap	$\frac{3(2R-h)^2}{4(3R-h)}$
vault	$\frac{3}{8} r$