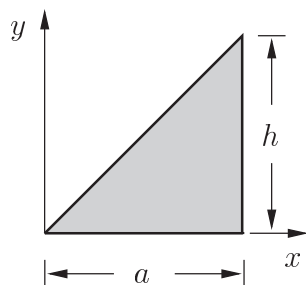


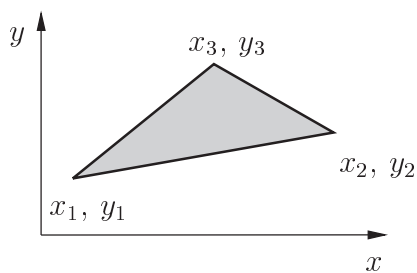
Tabelle von Schwerpunktskoordinaten

Flächen

Dreieck

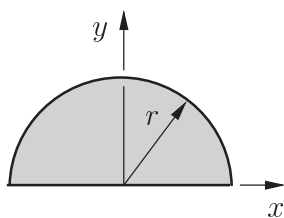


$$\begin{aligned}x_S &= \frac{2}{3}a \\y_S &= \frac{1}{3}h \\A &= \frac{1}{2}ah\end{aligned}$$



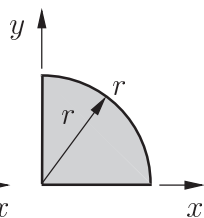
$$\begin{aligned}&= \frac{1}{3}(x_1 + x_2 + x_3) \\&= \frac{1}{3}(y_1 + y_2 + y_3) \\&= \frac{1}{2} \begin{vmatrix} x_2 - x_1 & y_2 - y_1 \\ x_3 - x_1 & y_3 - y_1 \end{vmatrix}\end{aligned}$$

Halbkreis



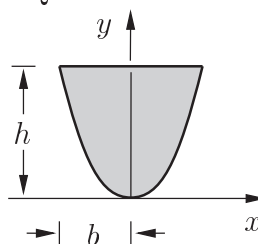
$$\begin{aligned}x_S &= 0 \\y_S &= \frac{4}{3\pi}r \\A &= \frac{\pi}{2}r^2\end{aligned}$$

Viertelkreis



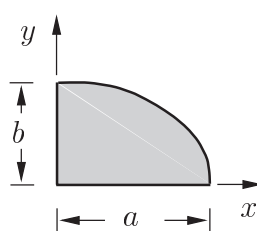
$$\begin{aligned}&= \frac{4}{3\pi}r \\&= \frac{4}{3\pi}r \\&= \frac{\pi}{4}r^2\end{aligned}$$

Quadr. Parabel



$$\begin{aligned}&= 0 \\&= \frac{3}{5}h \\&= \frac{4}{3}bh\end{aligned}$$

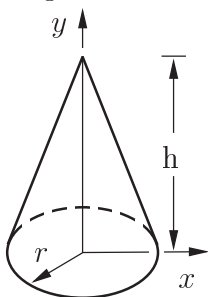
Viertelellipse



$$\begin{aligned}&= \frac{4}{3\pi}a \\&= \frac{4}{3\pi}b \\&= \frac{\pi}{4}ab\end{aligned}$$

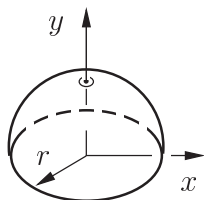
Körper

Kegel



$$\begin{aligned}x_S &= 0 \\y_S &= \frac{1}{4}h \\V &= \frac{1}{3}\pi r^2 h\end{aligned}$$

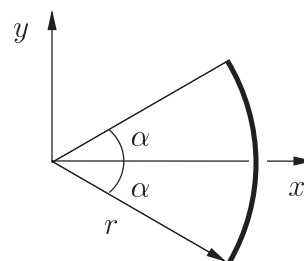
Halbkugel



$$\begin{aligned}x_S &= 0 \\y_S &= \frac{3}{8}r \\V &= \frac{2}{3}\pi r^3\end{aligned}$$

Linie

Kreisbogen



$$\begin{aligned}x_S &= \frac{\sin \alpha}{\alpha} r \\y_S &= 0 \\l &= 2\alpha r\end{aligned}$$