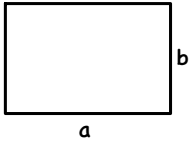


# Flächen und Körper

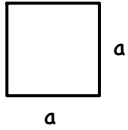
## Rechteck



Umfang:  $U = 2 \cdot a + 2 \cdot b$

Fläche:  $A = a \cdot b$

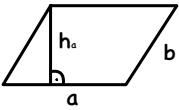
## Quadrat



Umfang:  $U = 4 \cdot a$

Fläche:  $A = a^2$

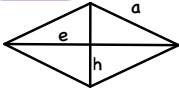
## Parallelogramm



Umfang:  $U = 2 \cdot a + 2 \cdot b$

Fläche:  $A = a \cdot h_c$

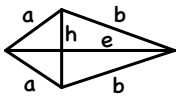
## Raute



Umfang:  $4 \cdot a$

Fläche:  $A = \frac{e \cdot h}{2}$

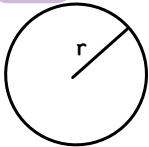
## Drachen



Umfang:  $U = 2 \cdot a + 2 \cdot b$

Fläche:  $A = \frac{1}{2} \cdot e \cdot h$

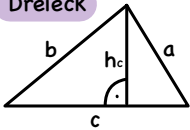
## Kreis



Umfang:  $U = 2 \cdot \pi \cdot r$

Fläche:  $A = \pi \cdot r^2$

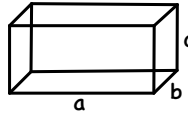
## Dreieck



Umfang:  $U = a + b + c$

Fläche:  $A = \frac{1}{2} \cdot a \cdot h_c$

## Quader



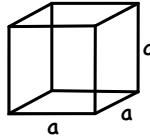
Oberfläche:

$$O = 2 \cdot (a \cdot b + a \cdot c + b \cdot c)$$

Volumen:

$$V = a \cdot b \cdot c$$

## Würfel



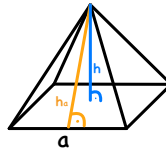
Oberfläche:

$$O = 6 \cdot a^2$$

Volumen:

$$V = a^3$$

## Pyramide



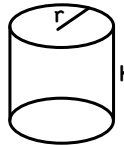
Oberfläche:

$$O = a^2 + (4 \cdot (\frac{1}{2} \cdot a \cdot h_a))$$

Volumen:

$$V = (a^2 \cdot h) : 3$$

## Zylinder



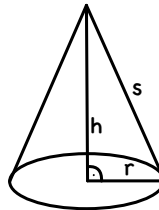
Oberfläche:

$$O = 2\pi \cdot r^2 + 2\pi \cdot r \cdot h$$

Volumen:

$$V = \pi \cdot r^2 \cdot h$$

## Kegel



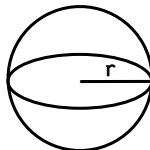
Oberfläche:

$$O = \pi \cdot r \cdot (r + s)$$

Volumen:

$$V = \frac{1}{2} \cdot \pi \cdot r^2 \cdot h$$

## Kugel



Oberfläche:

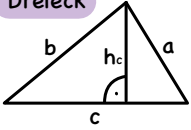
$$O = 4 \cdot \pi \cdot r^2$$

Volumen:

$$V = \frac{4}{3} \cdot \pi \cdot r^3$$

# Flächen und Körper

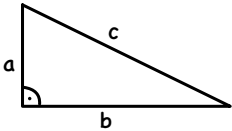
## Dreieck



Umfang:  $U = a + b + c$

Fläche:  $A = \frac{1}{2} \cdot a \cdot c$

## rechtwinkliges Dreieck



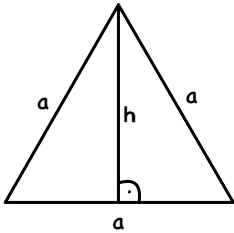
Umfang:

$$U = a + b + c$$

Fläche:

$$A = \frac{1}{2} \cdot a \cdot b$$

## gleichseitiges Dreieck



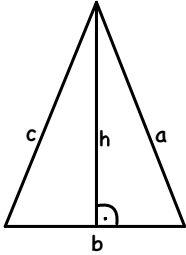
Umfang:

$$U = 3 \cdot a$$

Fläche:

$$A = \frac{1}{2} \cdot a \cdot h$$

## gleichschenkliges Dreieck



Umfang:

$$U = a + b + c$$

Fläche:

$$A = \frac{1}{2} \cdot c \cdot h$$