

## Formeljoker

### Rechteck

$$A = a \cdot b$$

$$u = 2a + 2b$$

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

$$d = \sqrt{a^2 + b^2}$$

$$a = \frac{A}{b}$$

$$b = \frac{A}{a}$$

### Quadrat

$$A = a^2$$

$$a = \sqrt{A}$$

$$u = a \cdot 4 = 4a$$

$$d = a \cdot \sqrt{2}$$

### rechtwinkliges Dreieck

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

$$u = a + b + c$$

$$c = \sqrt{a^2 + b^2}$$

$$a = \sqrt{c^2 - b^2}$$

$$b = \sqrt{c^2 - a^2}$$

$$h_c = \frac{2A}{c} = \frac{2 \cdot A}{c}$$

### Parallelogramm

$$A = a \cdot h_a$$

$$u = 2a + 2b$$

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

$$h_b = \frac{A}{b}$$

$$a = \frac{A}{h_a}$$

$$b = \frac{A}{h_b}$$

### gleichschenkliges Trapez

$$A = \frac{(a + c) \cdot h}{2}$$

$$u = a + 2b + c$$

$$h = \frac{2A}{a + c}$$

$$b = \sqrt{h^2 + \left(\frac{a - c}{2}\right)^2}$$

$$a = \frac{2A}{h} - c$$

$$= \frac{2A - ch}{h}$$

$$c = \frac{2A}{h} - a$$

$$= \frac{2A - ah}{h}$$

### Raute

$$A = a \cdot h$$

$$u = a \cdot 4 = 4a$$

$$a = \frac{u}{4}$$

$$A = \frac{e \cdot f}{2}$$

$$h = \frac{A}{a}$$

### gleichseitiges Dreieck

$$A = \frac{a^2}{4} \cdot \sqrt{3}$$

$$u = a \cdot 3 = 3a$$

$$h = \frac{a}{2} \cdot \sqrt{3}$$

$$a = \frac{2 \cdot h}{\sqrt{3}}$$