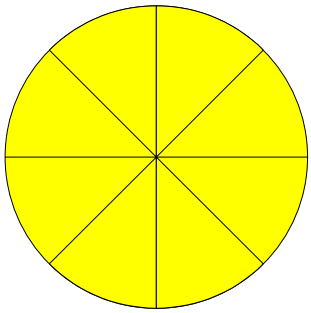
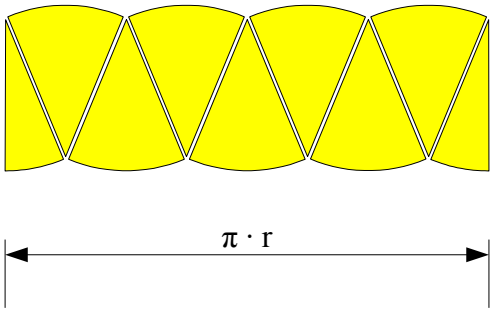
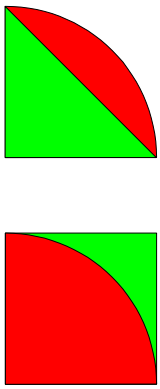
Kreisumfang und Kreisfläche



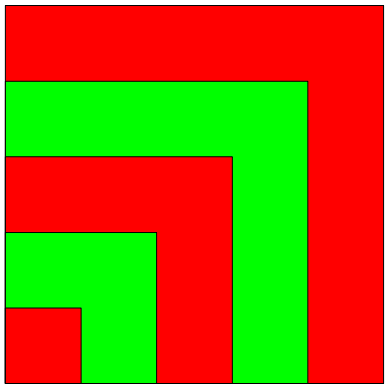
$$A = \pi \cdot r^2$$





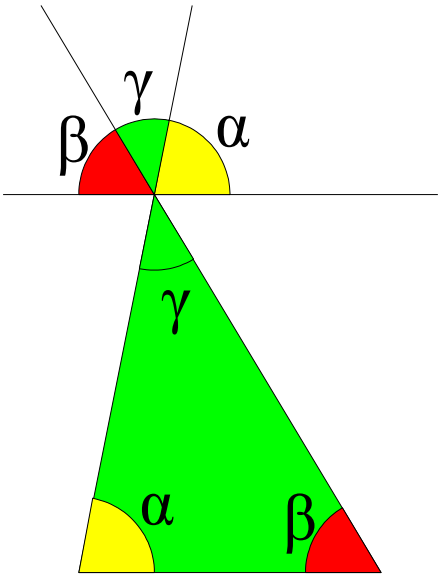
$$A_1 < A_2 < A_3$$
$$\tfrac{1}{2}\, r^2 < \tfrac{1}{4}\, \pi\, r^2 < r^2$$
$$2 \cdot \tfrac{1}{4}\, r^2 < \pi \cdot \tfrac{1}{4}\, r^2 < 4 \cdot \tfrac{1}{4}\, r^2$$
$$2 < \pi < 4$$
$$\pi \approx 3$$

Quadratzahlen als Summe der ungeraden Zahlen



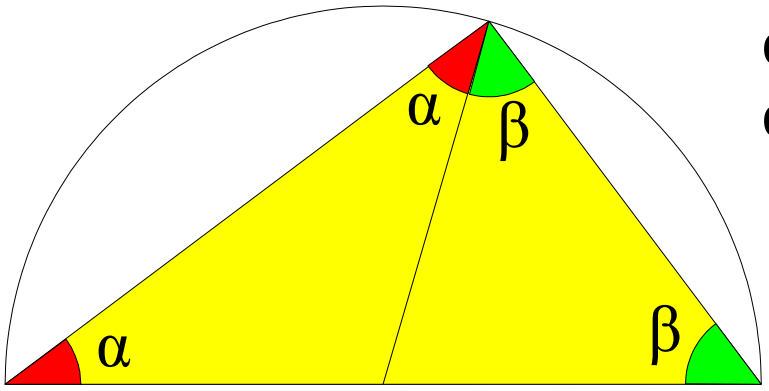
$$1 = 1$$
$$1 + 3 = 4$$
$$1 + 3 + 5 = 9$$
$$1 + 3 + 5 + 7 = 16$$
$$1 + 3 + 5 + 7 + 9 = 25$$

Winkelsumme im Dreieck



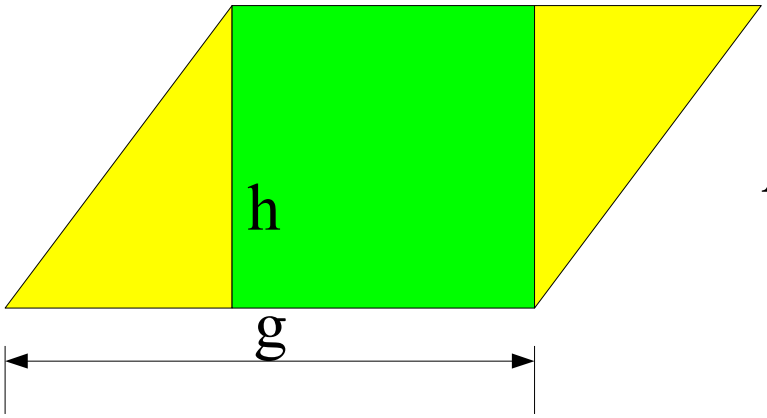
$$\alpha + \beta + \gamma = 180°$$

Thales-Satz



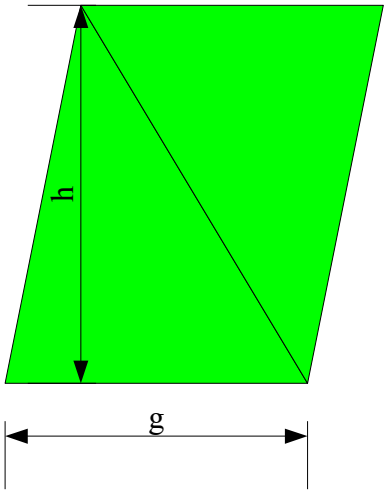
$$\alpha + \beta + (\alpha + \beta) = 180°$$
$$\alpha + \beta = 90°$$

Flächeninhalt beim Parallelogramm



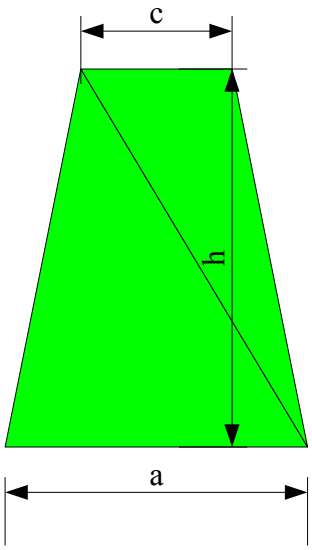
$$A = g \cdot h$$

Flächeninhalt beim Dreieck



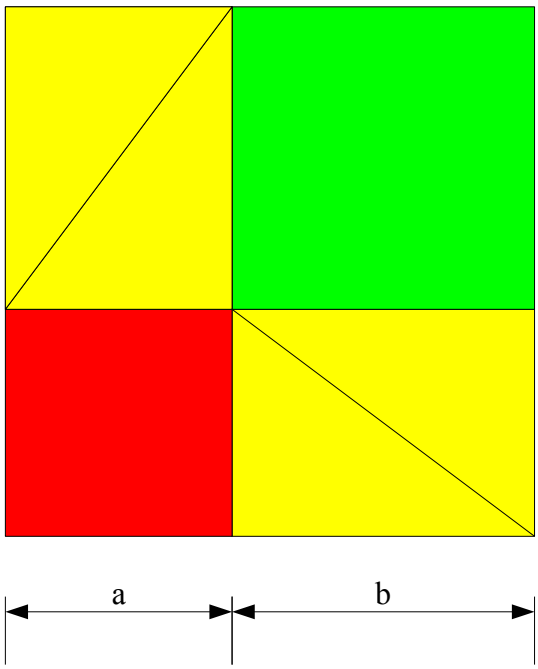
$$A_1 = \tfrac{1}{2} g \cdot h$$

Flächeninhalt beim Trapez



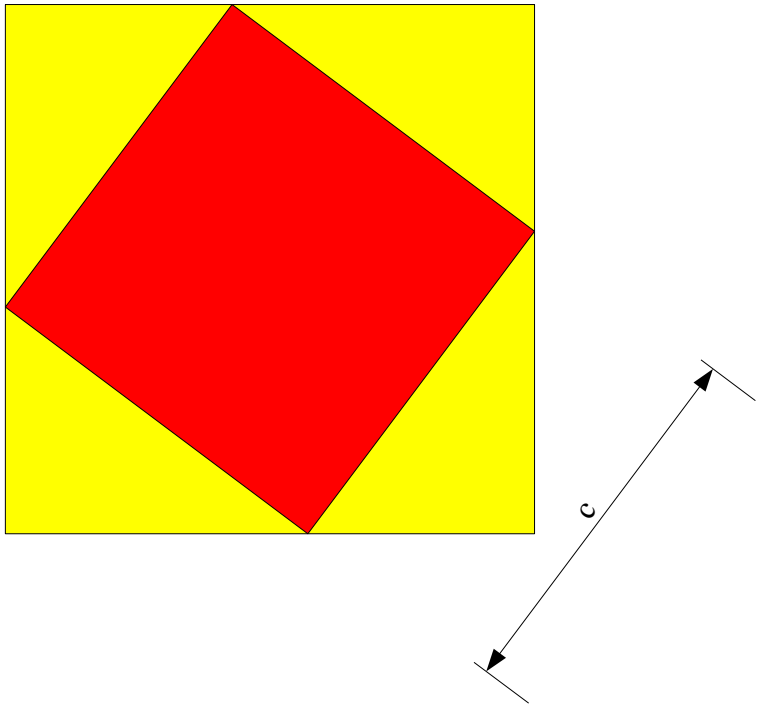
$$A_1 = \tfrac{1}{2} \cdot a \cdot h$$
$$A_2 = \tfrac{1}{2} \cdot c \cdot h$$
$$A = \tfrac{1}{2} \cdot (a+c) \cdot h$$

1. Binomische Formel



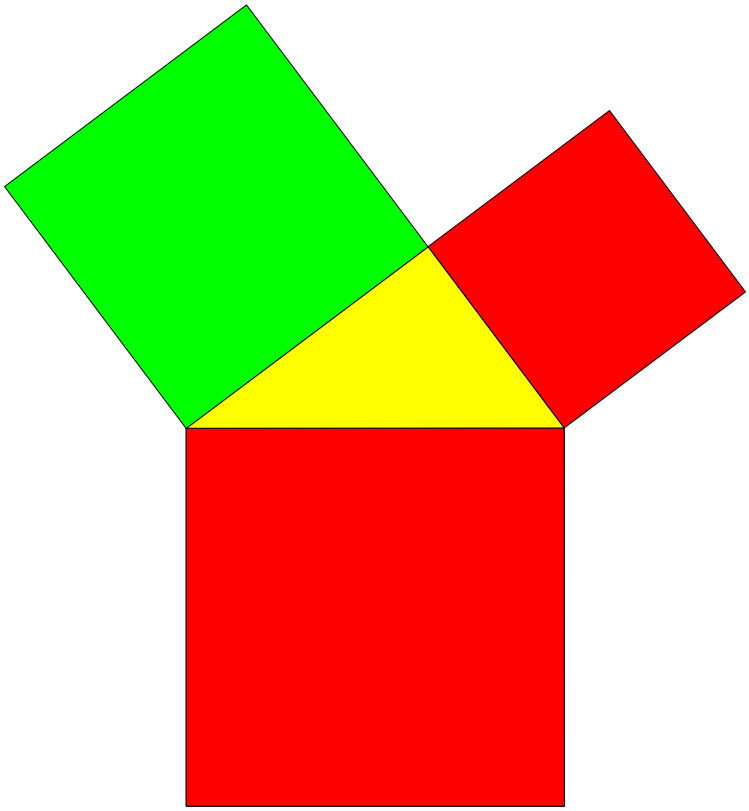
$$(a+b)^2 = a^2 + b^2 + 2ab$$

Pythagoras-Satz



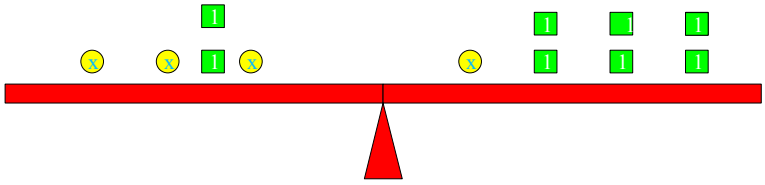
$$(a+b)^2 = c^2 + 4 \cdot \tfrac{1}{2}ab$$

Pythagoras-Figur

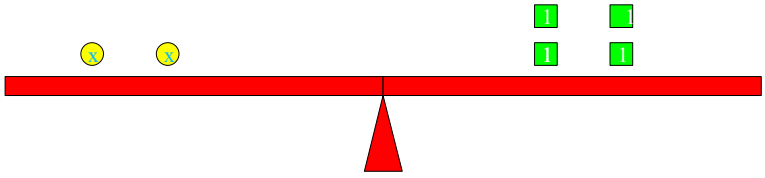


$$a^2 + b^2 = c^2$$

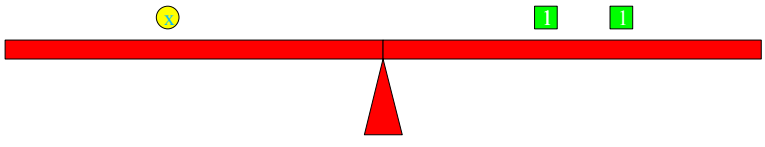
Äquivalenzumformungen bei linearen Gleichungen



$$3x + 2 = x + 6$$



$$2x = 4$$



$$x = 2$$