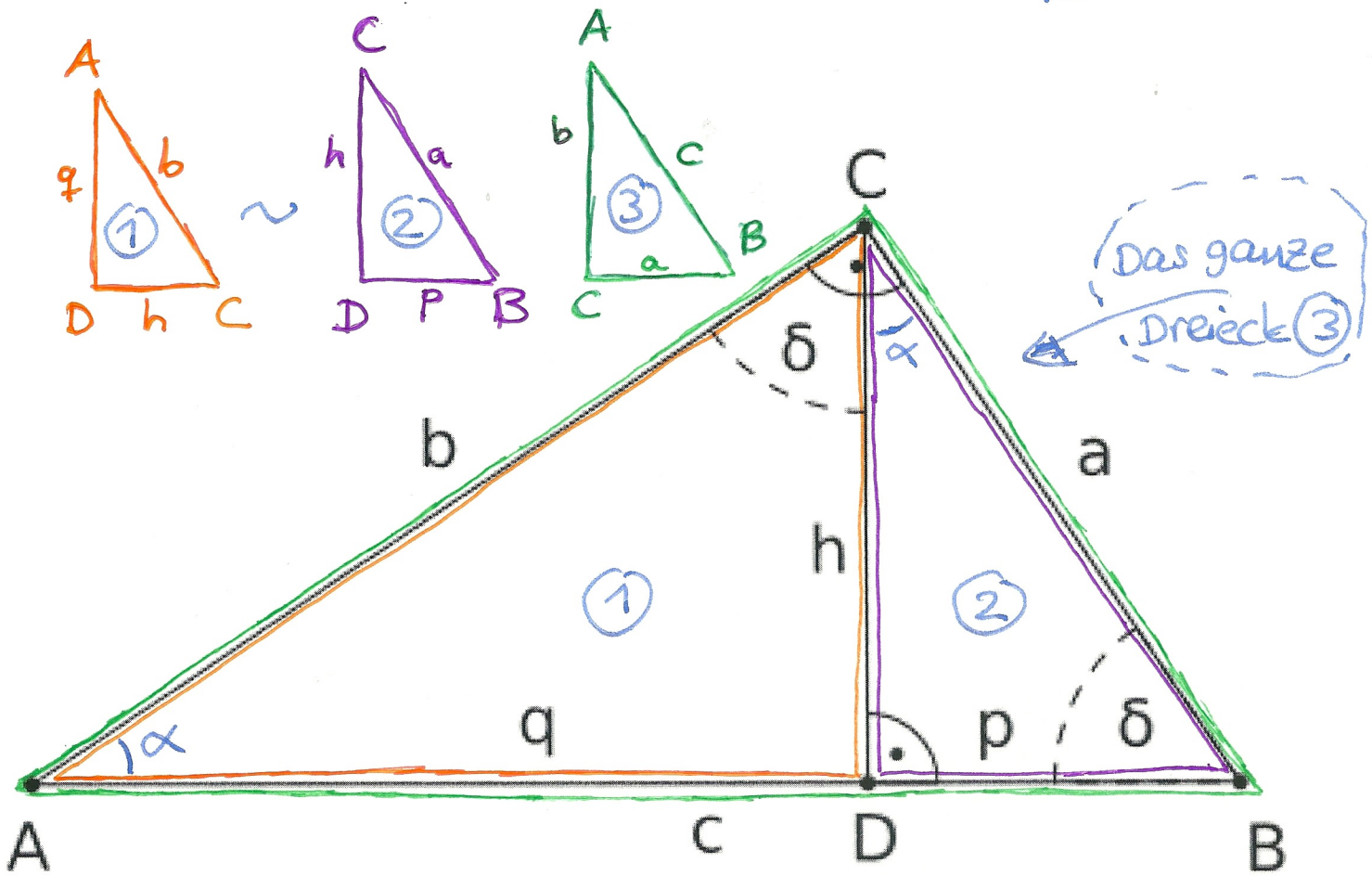


PYTHAGORASFAMILIE

W3

M4E



$$\triangle BCD \sim \triangle ABC \Rightarrow \frac{a}{p} = \frac{c}{a} \Rightarrow a^2 = cp$$

$$\triangle ADC \sim \triangle ABC \Rightarrow \frac{b}{q} = \frac{c}{b} \Rightarrow b^2 = cq$$

KATHETEN-SATZ

$$a^2 + b^2 = cp + cq = c(q + p) = c^2 \text{ Pythagoras o.1}$$

$$\triangle ADC \sim \triangle BCD \Rightarrow \frac{h}{p} = \frac{q}{h} \Rightarrow h^2 = pq$$

Höhensatz

(Bild von Wikipedia - Kathetensatz)