

# GEOMETRIE TAHÁK

# OBRÁZCE

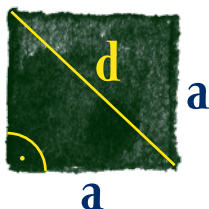
o = obvod

S = obsah

## ČTVEREC

$$o = 4a$$

$$S = a^2$$



## OBDELNÍK

$$o = 2(a + b)$$

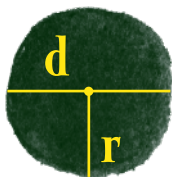
$$S = a \cdot b$$



## KRUH

$$o = 2\pi r = \pi d$$

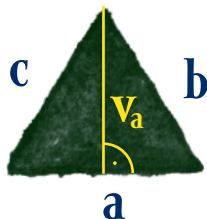
$$S = \pi r^2$$



## TROJÚHELNÍK

$$o = a + b + c$$

$$S = \frac{a \cdot v_a}{2}$$



součet vnitřních úhlů v trojúhelníku

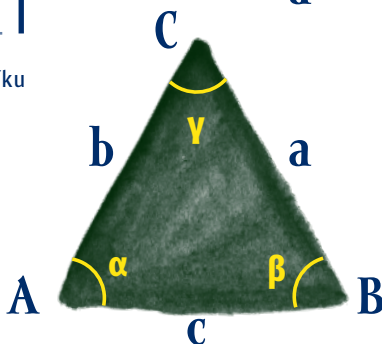
$$\alpha + \beta + \gamma = 180^\circ$$

Sinová věta

$$\frac{a}{\sin \alpha} = \frac{b}{\sin \beta} = \frac{c}{\sin \gamma}$$

Kosinová věta

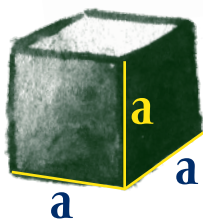
$$a^2 = b^2 + c^2 - 2bc \cos \alpha$$



# TĚLESA

V = objem

S = povrch



HRANOL

$$V = Sp \cdot v$$

$$S = 2Sp + Sp1$$

KRYCHLE

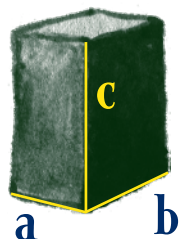
$$V = a^3$$

$$S = 6a^2$$

KVÁDR

$$V = abc$$

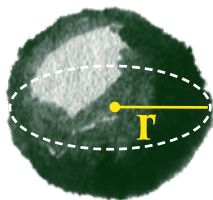
$$S = 2(ab + bc + ac)$$



KOULE

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

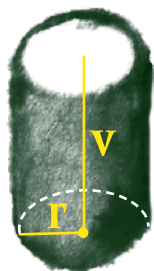
$$S = 4\pi r^2$$



VÁLEC

$$V = \pi r^2 v$$

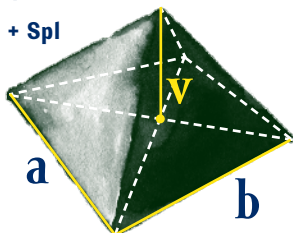
$$S = 2\pi r(r + v)$$



JEHLAN

$$V = \frac{1}{3} Sp \cdot v$$

$$S = Sp + Sp1$$



KUŽEL

$$V = \frac{1}{3} \pi r^2 v$$

$$S = \pi r(r + s)$$

