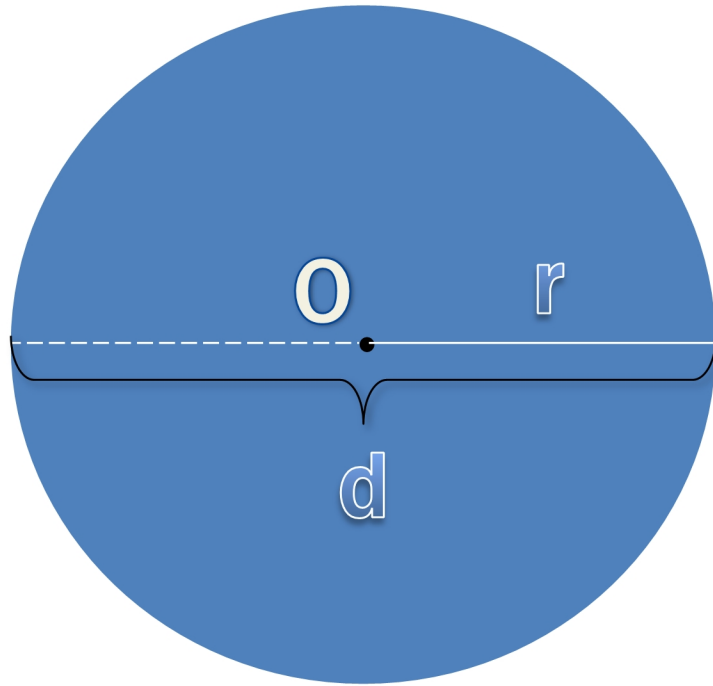


ГЕОМЕТРИЧНИ ФИГУРИ И ТЕЛА

*Формули за обиколка,
лице и обем*



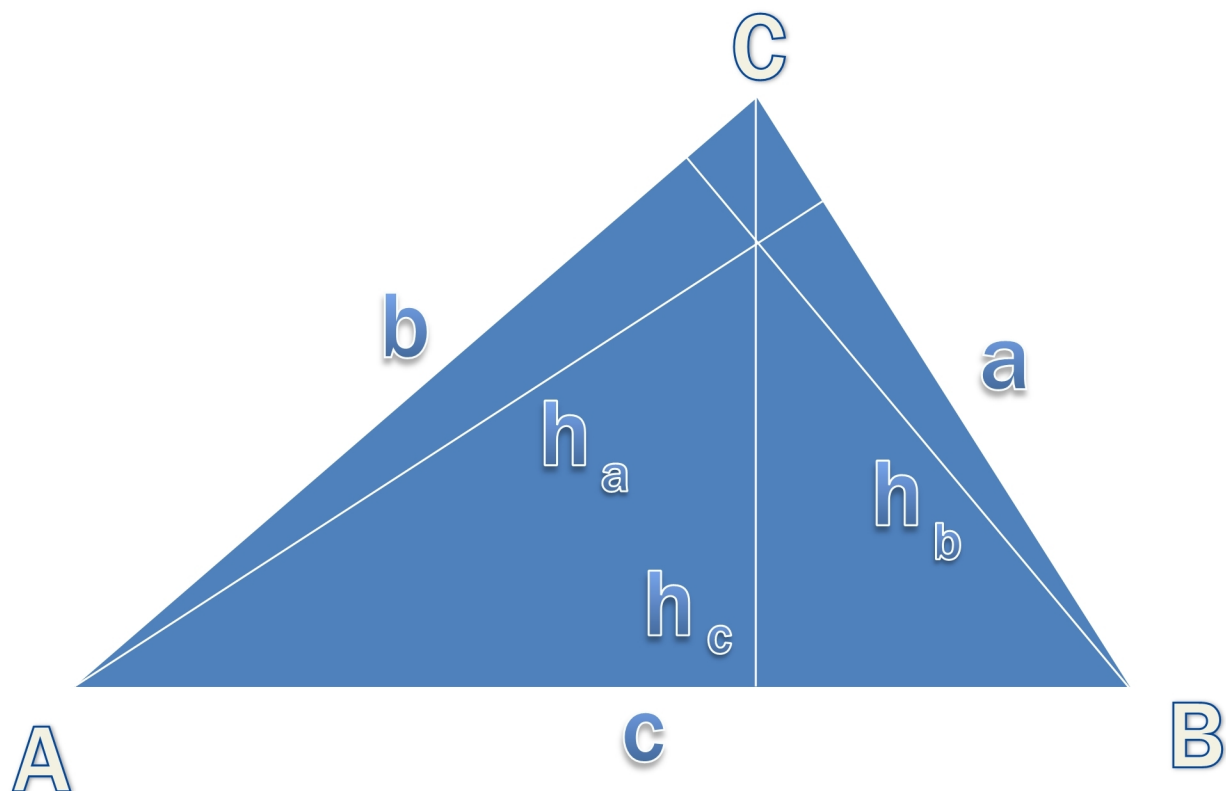
Кръг/окръжност



$$P = 2 \cdot \pi \cdot r = \pi \cdot d$$

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

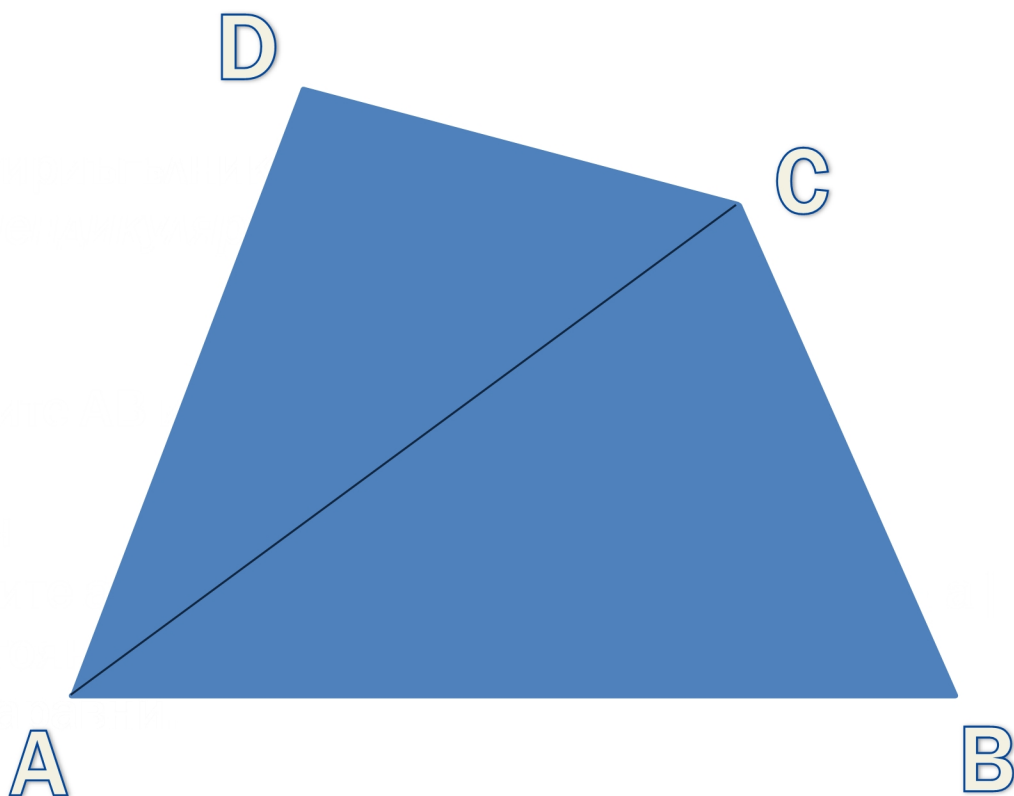
Триъгълник



$$P = a + b + c$$

$$S = \frac{a \cdot h_a}{2} = \frac{b \cdot h_b}{2} = \frac{c \cdot h_c}{2}$$

Четириъгълник



$$P = AB + BC + CD + DA$$

$$S = S_{\triangle ABC} + S_{\triangle ACD}$$

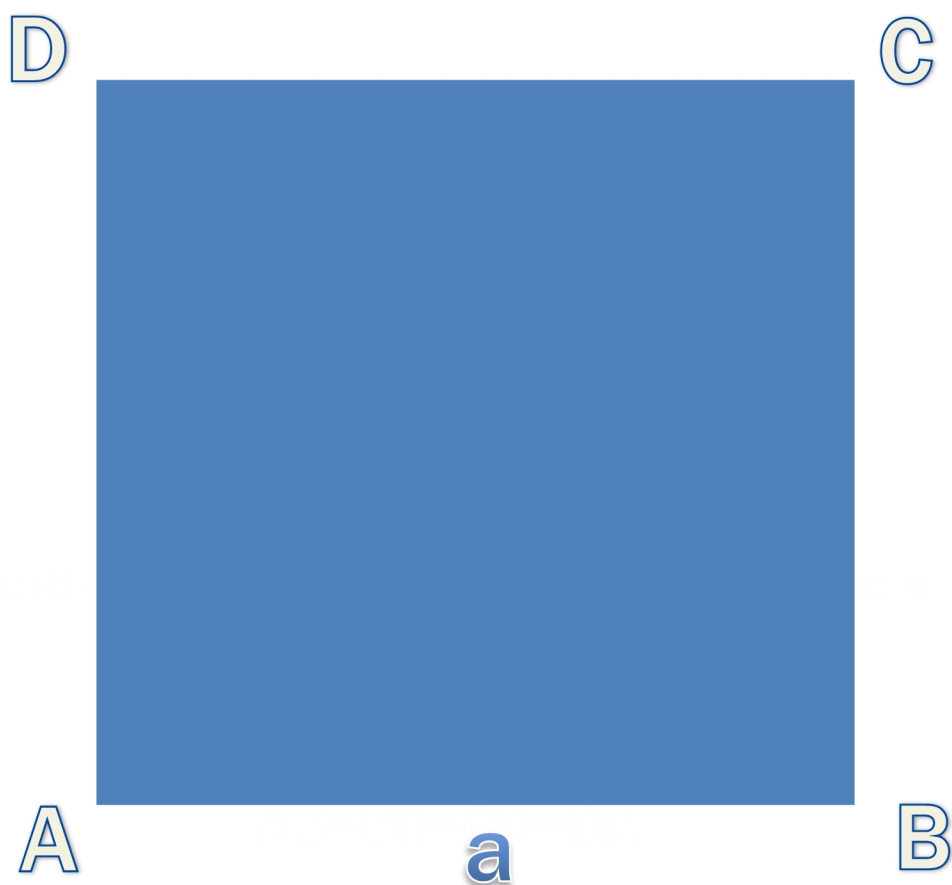
Правоъгълник



$$P = 2.a + 2.b$$

$$S = a.b$$

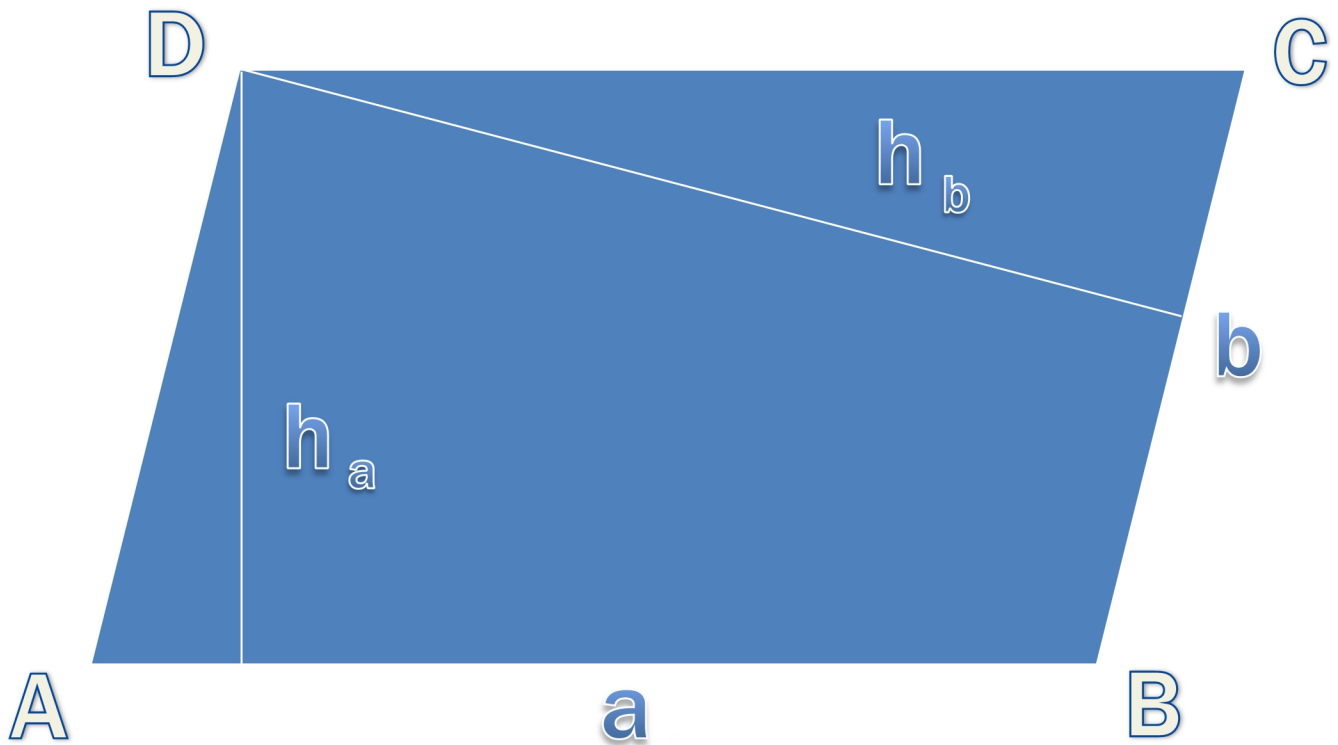
Квадрат



$$P = 4 \cdot a$$

$$S = a^2$$

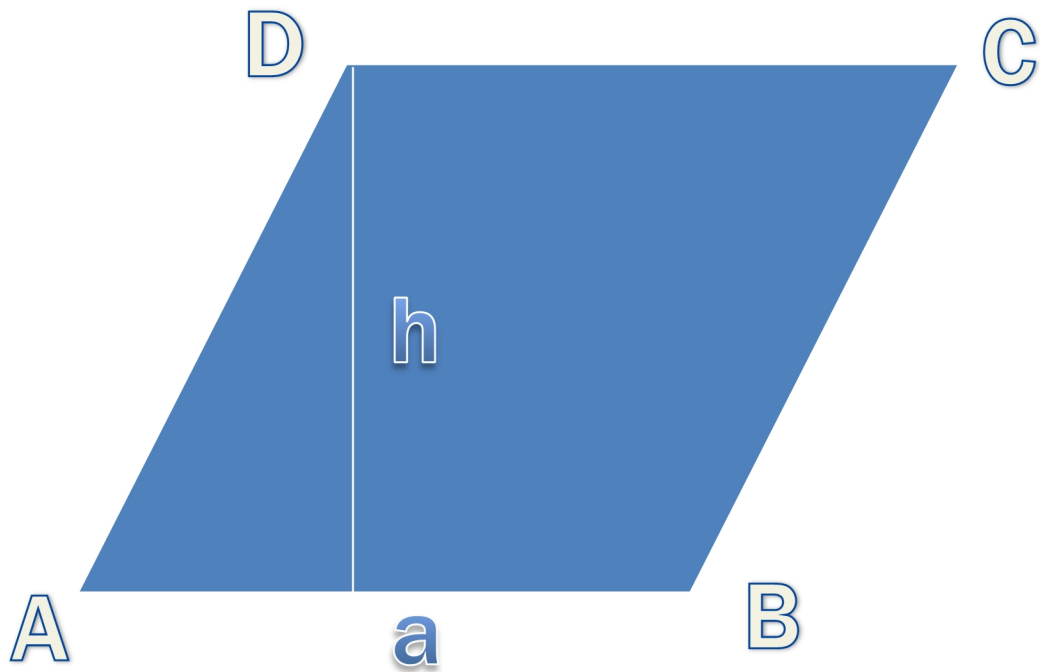
Успоредник



$$P = 2.a + 2.b$$

$$S = a.h_a = b.h_b$$

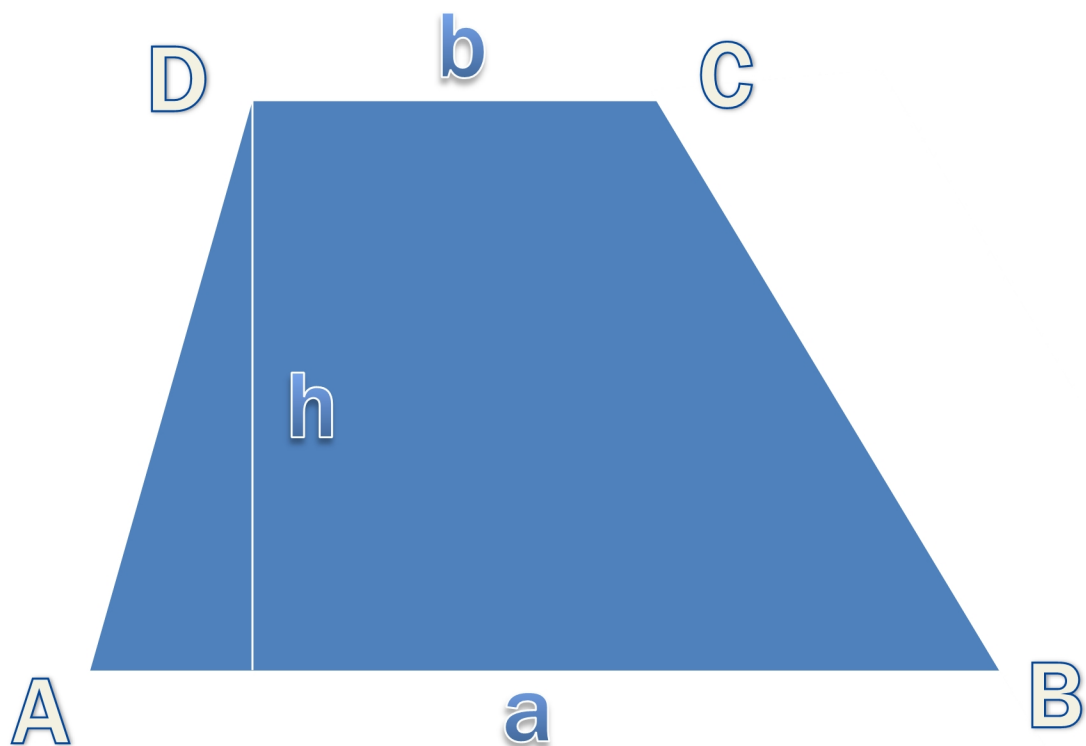
Ромб



$$P = 4a$$

$$S = a.h$$

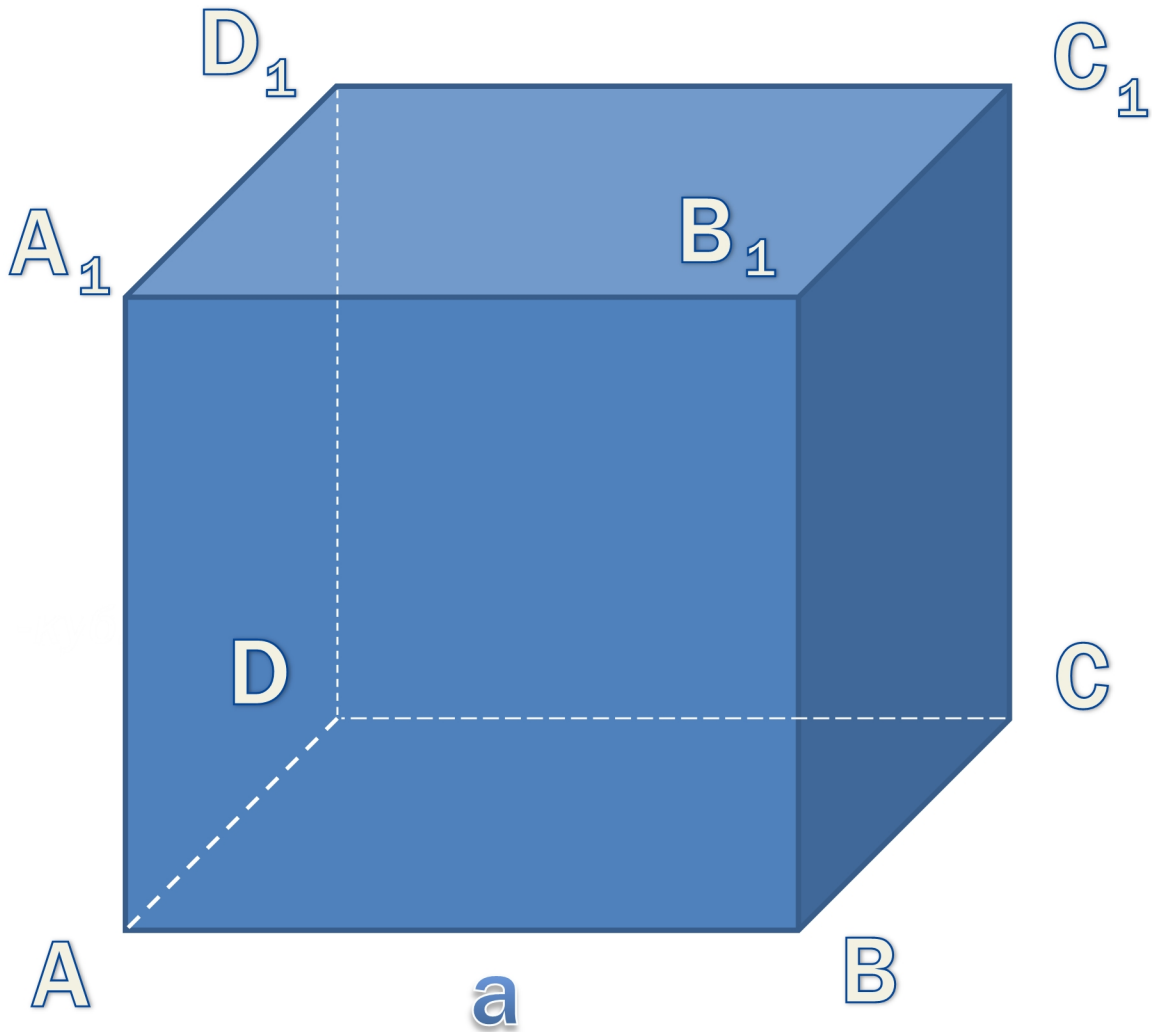
Трапец



$$P = AB + BC + CD + DE$$

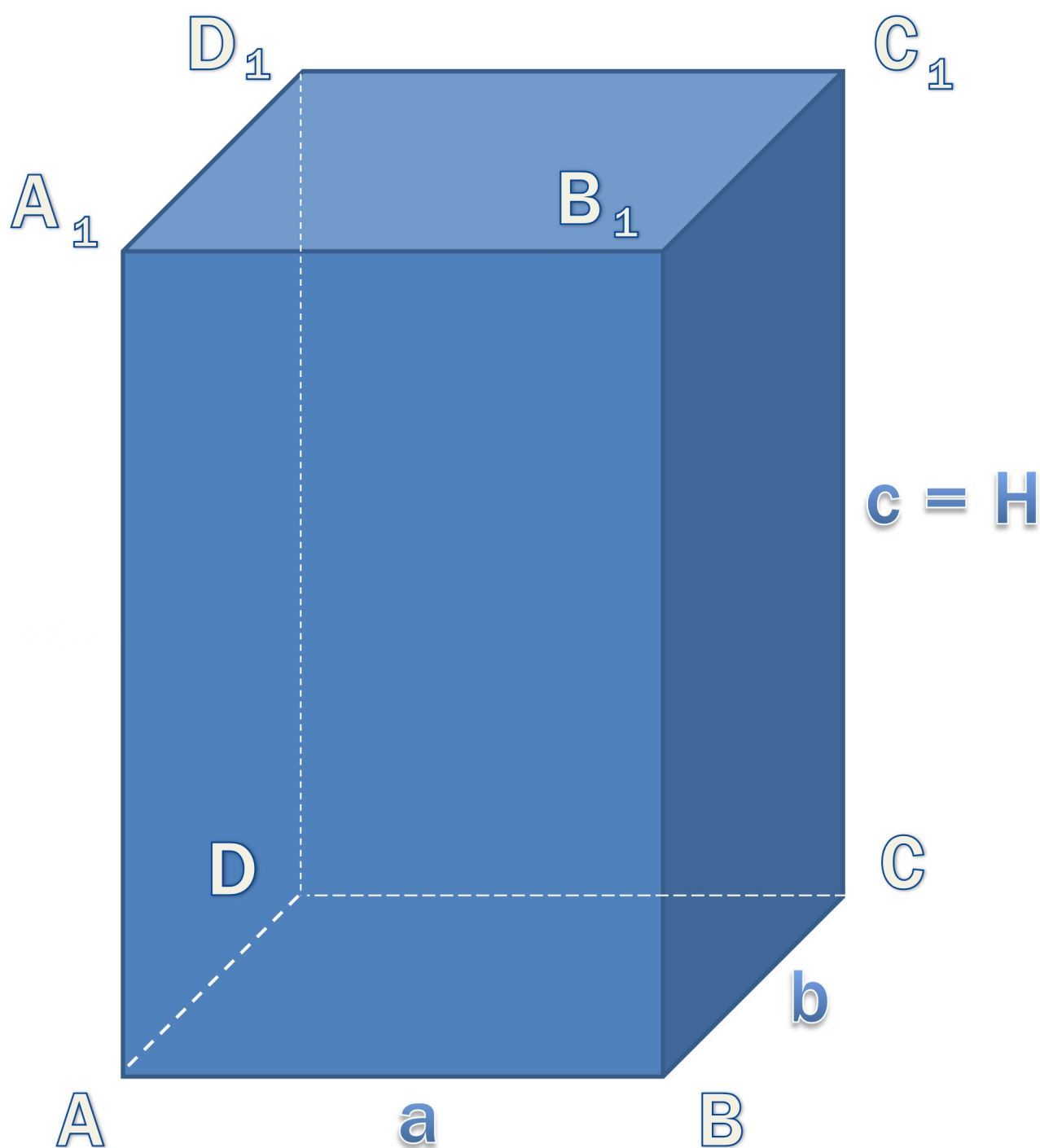
$$S = \frac{a + b}{2} \cdot h$$

Куб



$$S = 6a^2$$
$$V = a^3$$

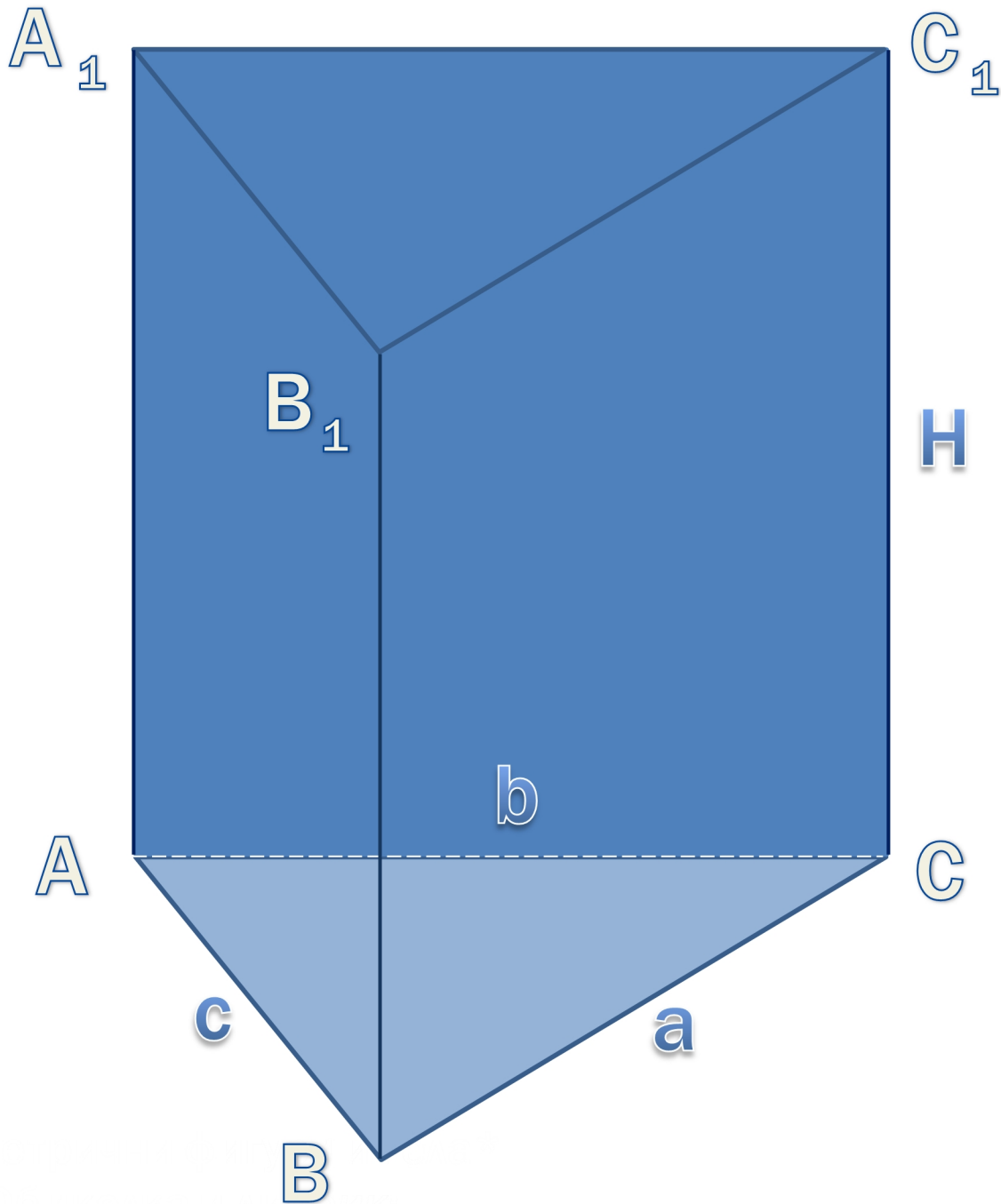
Параллелепипед



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

$$V = abc = S_{\text{осн.}} \cdot H = B \cdot H$$

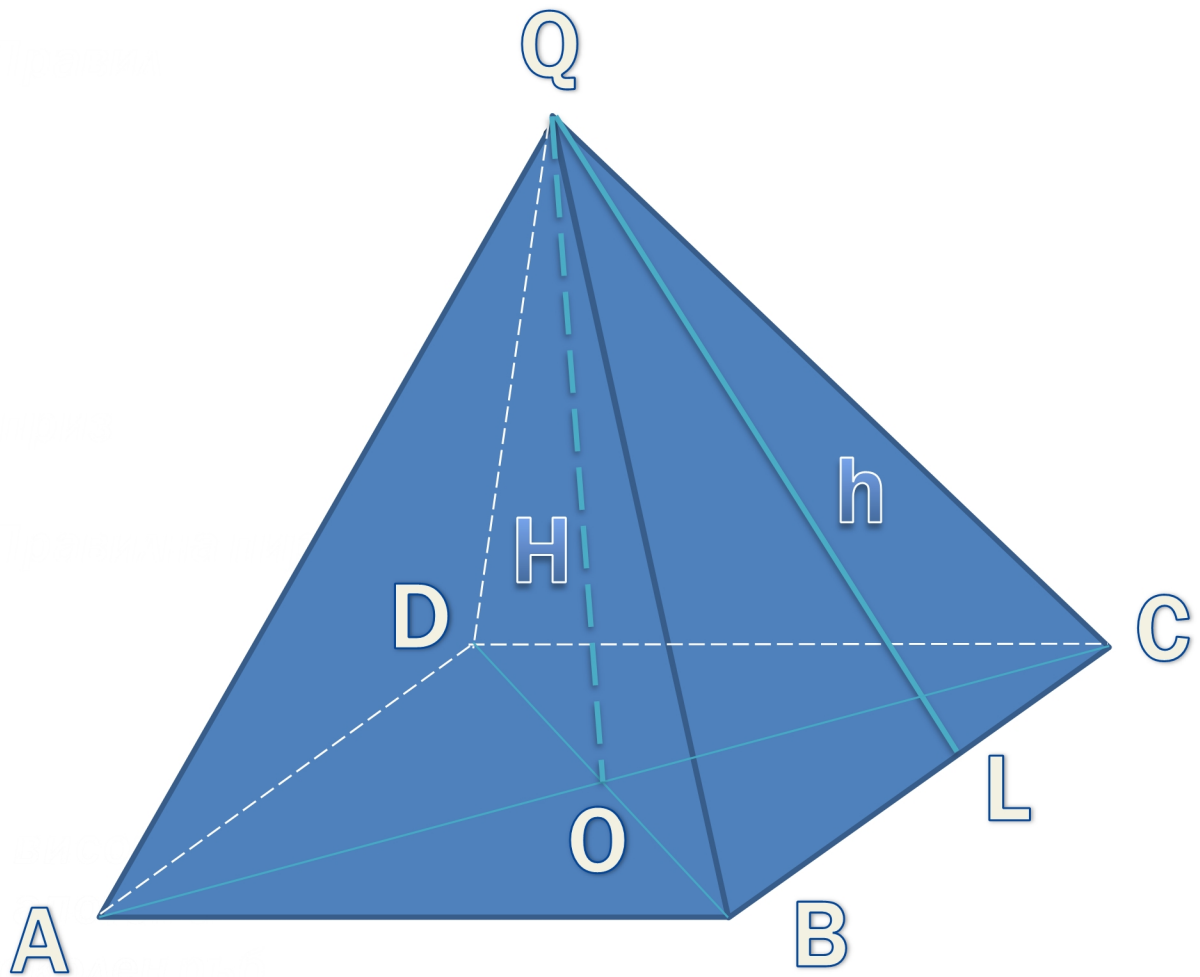
Призма



S околна повърхнина = P осн. $\cdot H$

$$\mathbf{S_1 = 2B + P \cdot H} \quad \mathbf{V = S_{осн.} \cdot H = B \cdot H}$$

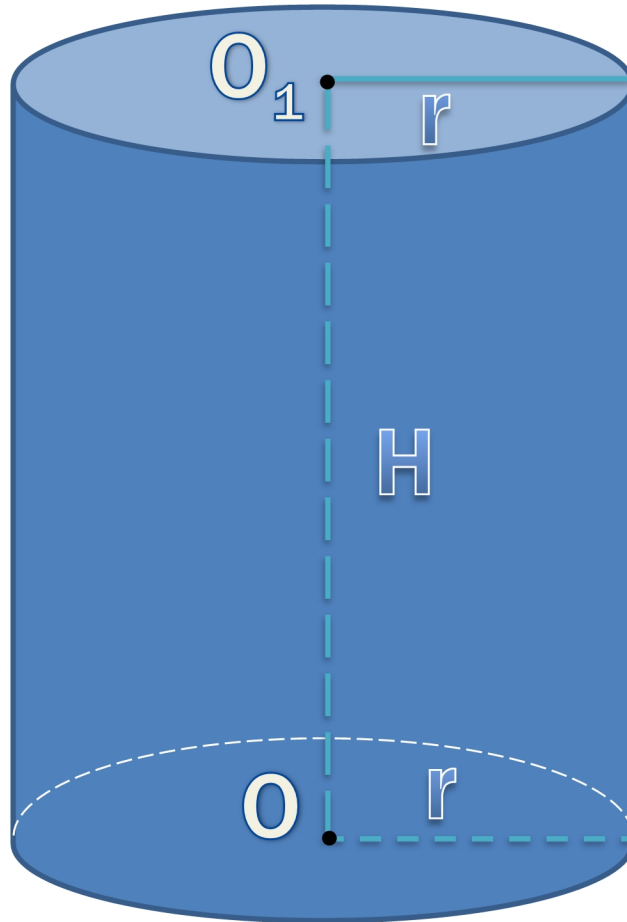
Пирамида



S околна повърхнина = $\frac{1}{2} P_{\text{осн.}} \cdot h$

$$S_1 = S + B \quad V = \frac{1}{3} B \cdot H$$

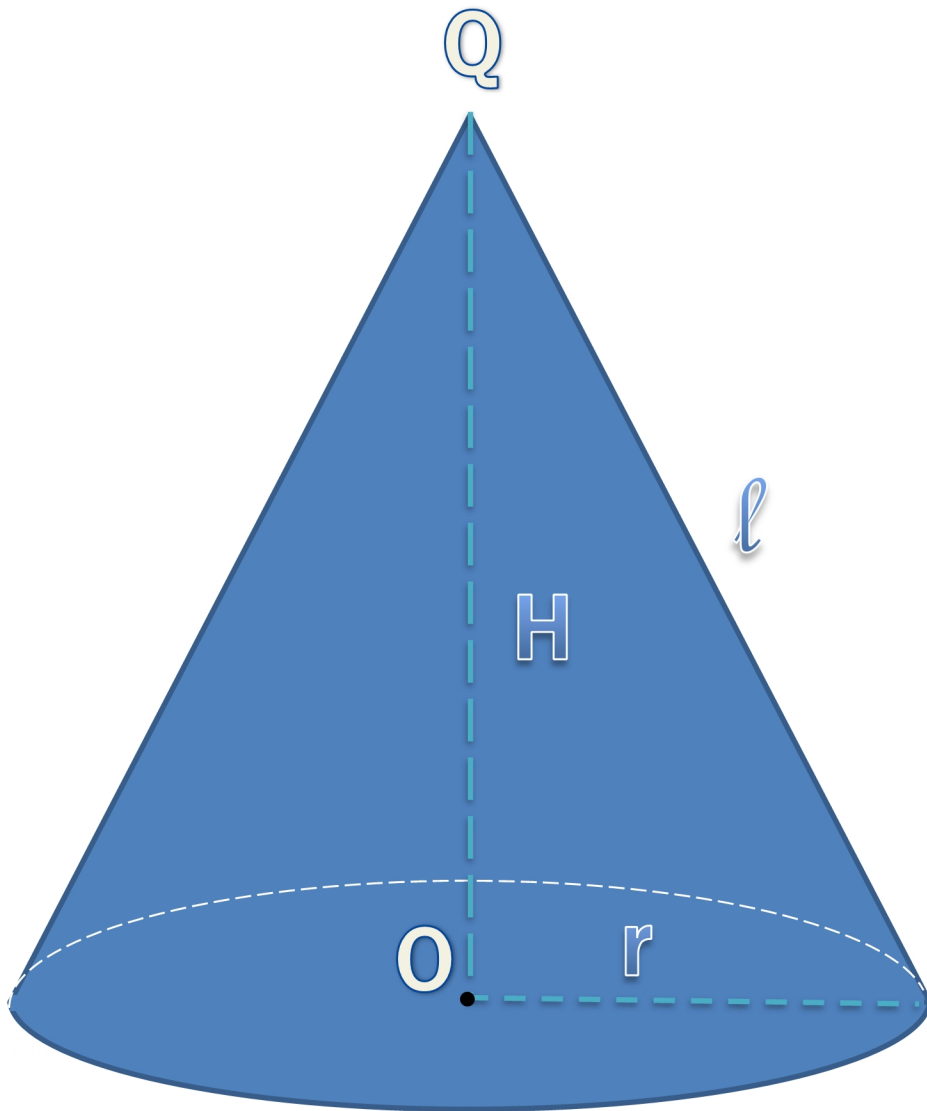
Цилиндър



$$S_{\text{ок.}} = P_{\text{осн.}} \cdot H = 2\pi r \cdot H$$

$$S_1 = S + 2B \quad V = B \cdot H \quad B = \pi r^2$$

Конус



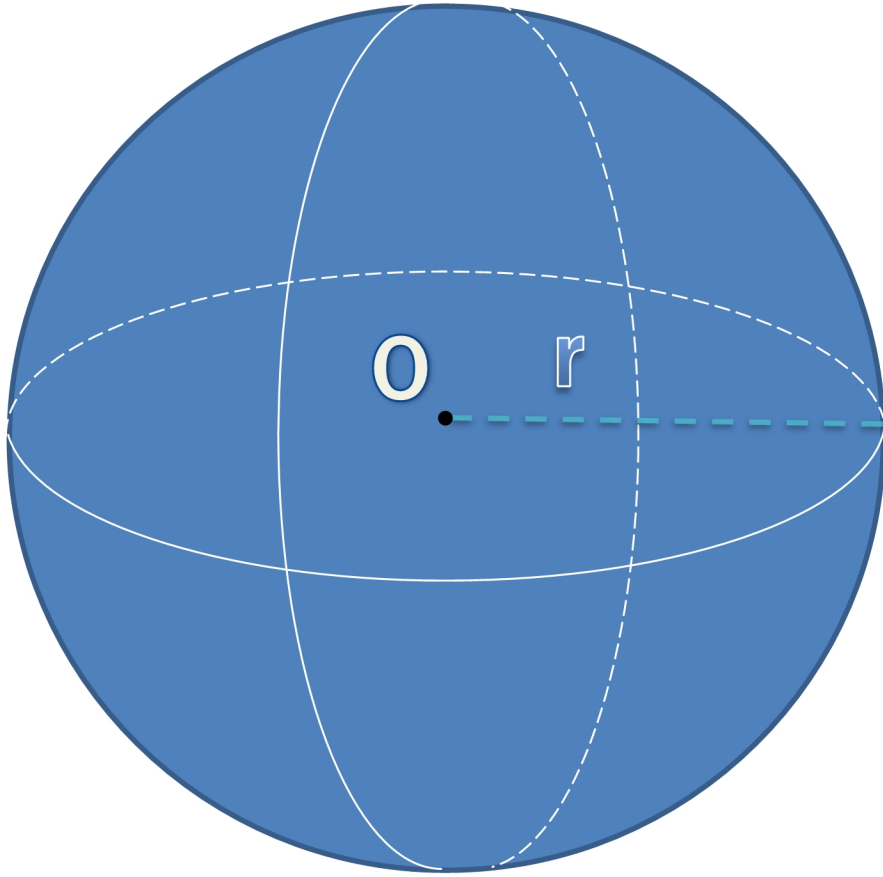
$$S_{\text{ок.}} = \pi \cdot l \cdot r$$

$$S_1 = S + B$$

$$V = \frac{1}{3} B \cdot H$$

$$B = \pi r^2$$

Кълбо



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

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