

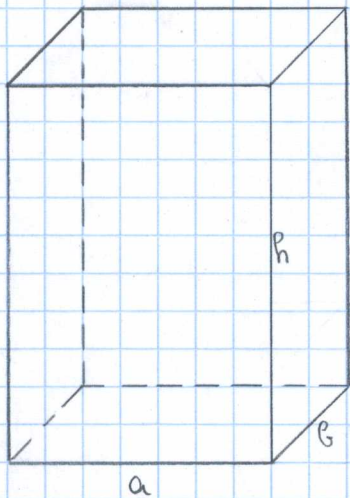
PRISMEN

$$V = G \cdot h$$

$$M = U_G \cdot h$$

$$O = 2 \cdot G + M$$

QUADER (allg.)



$$V = G \cdot h$$

$$M = U_G \cdot h$$

$$V = \overbrace{a \cdot b} \cdot h$$

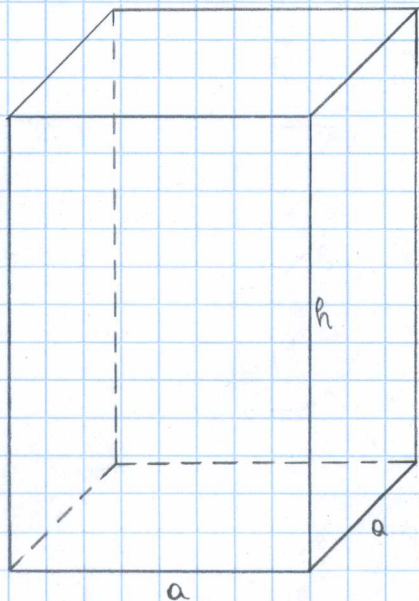
$$M = \overbrace{2(a+b)} \cdot h$$

$$O = 2 \cdot G + M$$

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

$$O = 2(a \cdot b + [a+b] \cdot h)$$

(mit quadratischer Grundfläche)



$$V = G \cdot h$$

$$M = U_G \cdot h$$

$$V = a \cdot a \cdot h$$

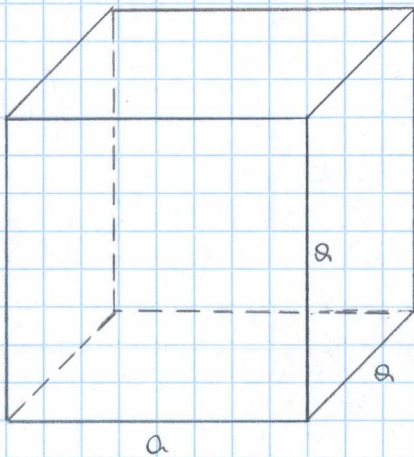
$$M = 4 \cdot a \cdot h$$

$$V = a^2 \cdot h$$

$$O = 2 \cdot a \cdot a + 4 \cdot a \cdot h$$

$$O = 2a(a + 2 \cdot h)$$

WÜRFEL



$$V = G \cdot h$$

$$M = U_G \cdot h$$

$$V = a \cdot a \cdot a$$

$$M = 4 \cdot a \cdot a$$

$$V = a^3$$

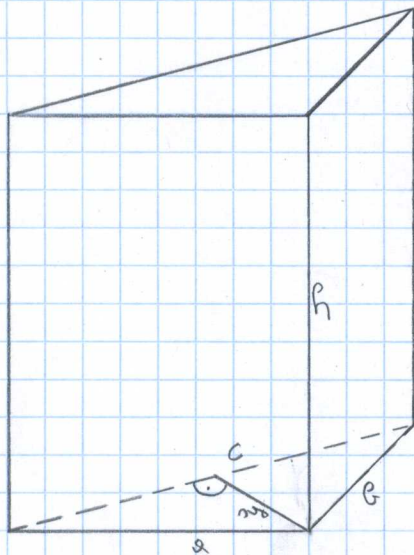
$$M = 4 \cdot a^2$$

$$O = 2 \cdot G + M$$

$$O = 2 \cdot a \cdot a + 4 \cdot a^2$$

$$O = 2 \cdot a^2 + 4 \cdot a^2 \Rightarrow O = 6 \cdot a^2$$

GERADE PRISMEN



$$V = G \cdot h$$

$$M = U_G \cdot h$$

$$V = \frac{c \cdot h_c}{2} \cdot h$$

$$M = (a + b + c) \cdot h$$

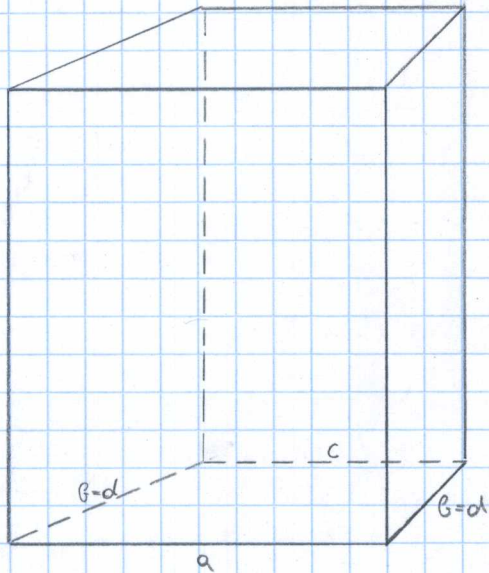
$$O = 2G + M$$

$$O = 2 \cdot \frac{c \cdot h_c}{2} + (a + b + c) \cdot h$$

$$O = c \cdot h_c + (a + b + c) \cdot h$$

G = DREIECK

G-Trapez



$$V = G \cdot h_k$$

$$M = U_G \cdot h_k$$

$$V = \frac{(a+c) \cdot h}{2} \cdot h_k \quad M = (a+2b+c) \cdot h_k$$

$$0 = 2 \cdot G + M$$

$$0 = 2 \cdot \frac{(a+c) \cdot h}{2} \cdot h_k + (a+2b+c) \cdot h_k$$

$$0 = h_k (a+c) \cdot h + (a+2b+c) \cdot h_k$$