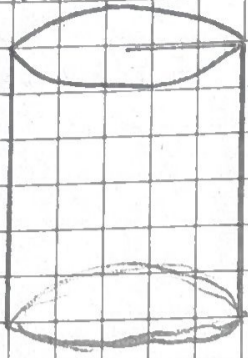


Kreiszylinder

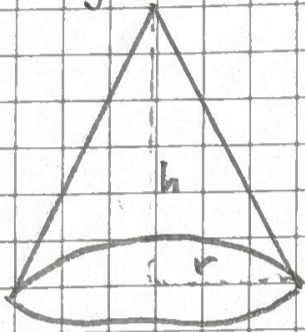


$$V = r^2 \cdot \pi \cdot h = \frac{d^2 \cdot \pi}{4} \cdot h$$

$$M = 2\pi r h = d\pi h$$

$$O = 2\pi r (h+r) = d\pi \left(h + \frac{d}{2}\right)$$

Kegel

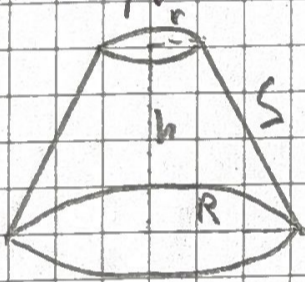


$$V = A \cdot \frac{h}{3} = r^2 \pi \frac{h}{3} = d^2 \cdot \pi \frac{h}{12}$$

$$M = r\pi s = r\pi \sqrt{r^2 + h^2}$$

$$O = r\pi s + r^2\pi = r\pi (s+r)$$

Kegelstumpf



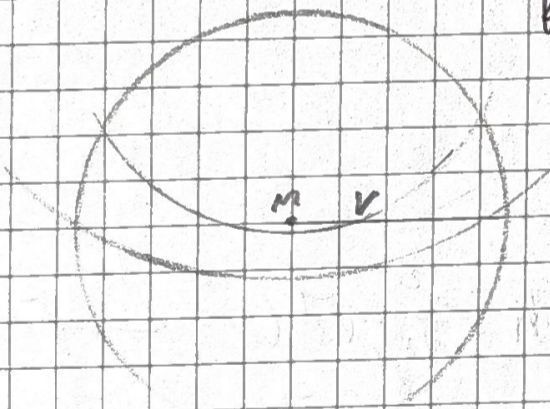
$$V = (R^2 + R \cdot r + r^2) \cdot \pi \cdot \frac{h}{3}$$

$$s = \sqrt{(R-r)^2 + h^2}$$

$$M = (R+r) \cdot \pi \cdot s$$

$$O = \pi [R^2 + r^2 + s \cdot (R+r)]$$

Kugel



$$V = \frac{4}{3} \cdot \pi \cdot r^3 = \frac{1}{6} \pi d^3$$

$$O = 4\pi r^2 = \pi d^2$$