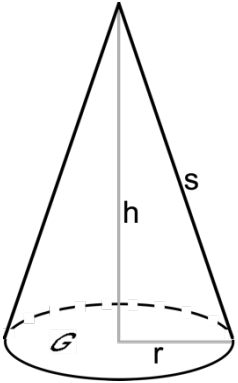
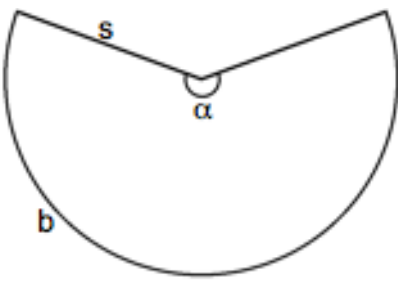


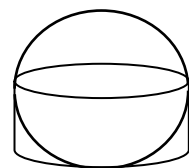
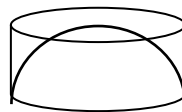
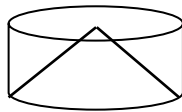
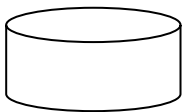
Mantellinie, Mantelfläche, Oberfläche und Volumen des Kegels

	<p>Mantellinie</p> $s = \sqrt{h^2 + r^2}$ <p>Grundkreisumfang = Bogenlänge des "Mantelsektors"</p> $u = 2 \cdot r \cdot \pi \quad b = 2 \cdot s \cdot \pi \cdot \frac{\alpha}{360^\circ}$
	<p>Mantelfläche</p> $M = s^2 \cdot \pi \cdot \frac{\alpha}{360^\circ} \quad \frac{\alpha}{360^\circ} = \frac{r}{s}$ $M = s^2 \cdot \pi \cdot \frac{r}{s} = s \cdot \pi \cdot r$ <p>Oberfläche</p> $O = r^2 \cdot \pi + M$ <p>Volumen</p> $V = \frac{r^2 \cdot \pi \cdot h}{3}$

Kugel

3. Bez

Kugelvolumen



$$V_{\text{Zylinder}} = r^3 \pi$$

$$V_{\text{Kegel}} = \frac{1}{3} r^3 \pi$$

$$V_{\text{Halbkugel}} = \frac{2}{3} r^3 \pi$$

$$V_{\text{Kugel}} = \frac{4}{3} r^3 \pi$$

Kugeloberfläche

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