

Kegel

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

$$M = \pi r s$$

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

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

	a)	b)	c)	d)	e)	f)
r	3m	8m	4m	19m	4,5m	12m
h	10m	43m	17m	82m	20,4m	35m
V						
M						
O						

Lösungen

a) $V = 94,25 \text{ m}^3$
 $M = 98,40 \text{ m}^2$
 $O = 126,67 \text{ m}^2$

b) $V = 2881,89 \text{ m}^3$
 $M = 1099,25 \text{ m}^2$
 $O = 1300,31 \text{ m}^2$

c) $V = 284,84 \text{ m}^3$
 $M = 54,62 \text{ m}^2$
 $O = 104,88 \text{ m}^2$

d) $V = 30\,999,14 \text{ m}^3$
 $M = 5024,27 \text{ m}^2$
 $O = 6158,39 \text{ m}^2$

e) $V = 432,60 \text{ m}^3$
 $M = 295,33 \text{ m}^2$
 $O = 358,95 \text{ m}^2$

f) $V = 5277,88 \text{ m}^3$
 $M = 1394,87 \text{ m}^2$
 $O = 1847,26 \text{ m}^2$