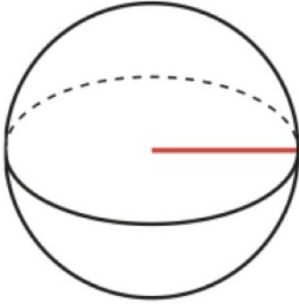


S. 162 A10 a, b, c, d - Oberflächeninhalt

15.5.25

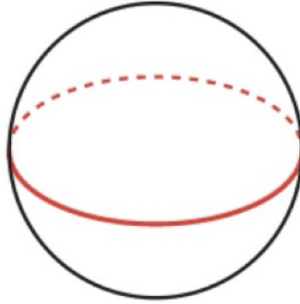
$$O_2 + M_2 + G = 814,3 \text{ [cm}^2\text{]}$$

a)



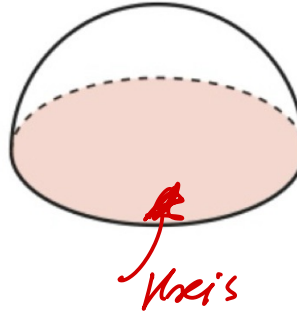
Radius 6,5 cm

b)



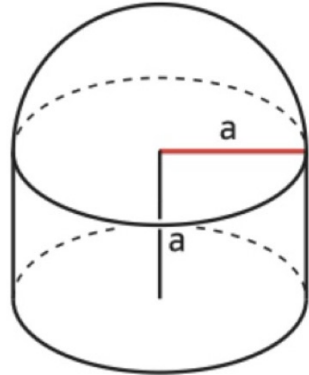
Umfang 12,3 cm

c)



Inhalt der Querschnittsfläche
270 cm²

d)



a = 7,2 cm

Kugel

$$\begin{aligned} O &= 4\pi r^2 \\ &= 4\pi \cdot 6,5^2 \\ &= 530,9 \text{ [cm}^2\text{]} \end{aligned}$$

$$U = \pi \cdot d$$

$$d = \frac{U}{\pi} = 3,9$$

$$r = \frac{d}{2} = 1,95$$

⋮

$$O = 47,8 \text{ [cm}^2\text{]}$$

$$A = \pi r^2$$

$$r = \sqrt{\frac{A}{\pi}} = 9,3$$

Halbkugel

$$\begin{aligned} O &= \frac{1}{2} \cdot 4\pi r^2 + G \\ &= 543,4 + 270 \\ &= 813,4 \text{ [cm}^2\text{]} \end{aligned}$$

Halbkugel

$$O = \frac{1}{2} \cdot 4\pi a^2 = 329,7$$

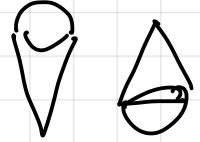
Mantel Zylinder

$$\begin{aligned} M &= 2\pi r \cdot h \\ &= 2\pi \cdot a^2 = 325,7 \end{aligned}$$

Grundfläche

$$G = \pi r^2 = 162,9$$

HA 9 Berechne die Oberfläche zu 3c
+ Skizze ins Heft



Aus der
Klassenarbeit