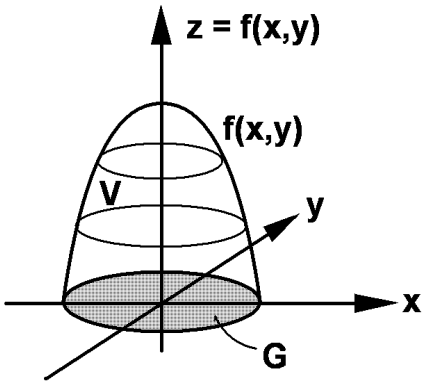
Übungen in Analysis ◇ Exercices en analyse ◇ T. E1 ◇ II / 13

Probl. 1 (a) $f(x,y) = 4 - x^2 - y^2$

$V = ?$



(b) $f(x,y) = 4 - x^4 - y^2$

$V = ?$

Probl. 2 $f(x,y) = \sin(x+y) + 1, \;\; G = [-4\,\pi, 4\,\pi] \times [-4\,\pi, 4\,\pi]$

(a) Oberfläche = ? • *Surface = ?*

(b) $V = ?$

Probl. 3 $\vec{\rho}(u,v) = \begin{pmatrix} u^2 - v^2 \\ ln(1+u+v) \cdot \sin(u+v) \\ u \cdot \sin(u \cdot v) \end{pmatrix} \qquad u, v \in [0, \pi]$

$A = ?$