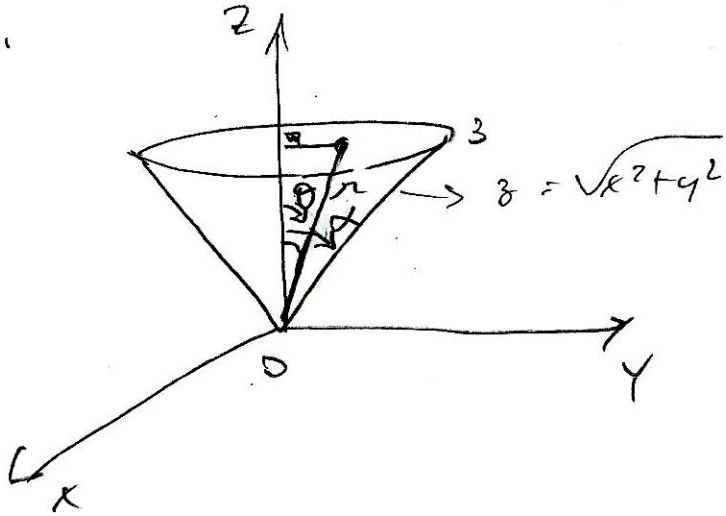
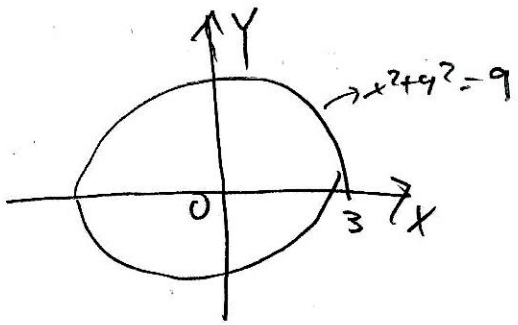
3.

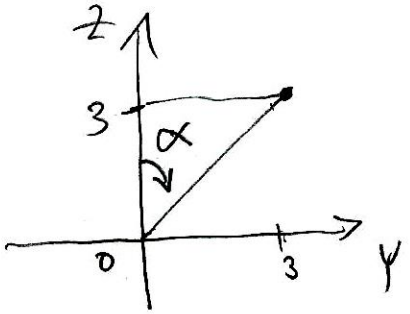



Για θ fixo : $0 \le r \le \frac{3}{\cos\theta}$ 0.5

$\cos\theta = \frac{3}{r}$

$r = \frac{3}{\cos\theta}$




$\alpha = \frac{\pi}{4}$ : $0 \le \theta \le \frac{\pi}{4}$ 0.5

Δαί $\Omega$ : $\begin{cases} 0 \le r \le \frac{3}{\cos\theta} \\ 0 \le \theta \le \pi/4 \\ 0 \le \varphi \le 2\pi \end{cases}$

$$\int_\Omega \sqrt{x^2+y^2+z^2}\, dxdydz = \int_{\varphi=0}^{2\pi} \int_{\theta=0}^{\pi/4} \int_{r=0}^{\frac{3}{\cos\theta}}$$

r r² sin θ dr dθ dφ