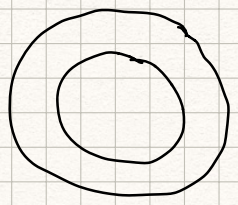
- Esercizio 1
- Esercizio 2

$f(x,y) = \sqrt{x^2+y^2}$ calcolare l'integrale doppio di D limitato da

$x^2+y^2 = 4$

$x^2+y^2 = 9$



$$\iint_D \sqrt{x^2+y^2}\, dx\, dy = \int_0^{2\pi}\int_2^3 \sqrt{\rho^2\cos^2\varphi + \rho^2\sin^2\varphi}\cdot\rho$$

$$= \int_0^{2\pi} \frac{\rho^3}{3}\Big|_2^3 \, d\varphi = 2\pi \frac{\rho^3}{3}\Big|_2^3$$

Esercizio 3

$\iint x^2+y^2\, dx\, dy$ stesso dominio