

Massimi e minimi assoluti

① $f(x,y) = x^4 + y^2$

$$D = \left\{ (x,y) \in \mathbb{R}^2 : x^2 + y^2 \leq 1, x+y \geq 0 \right\}$$

② $f(x,y) = (x^2 + y^2) e^{-x^2 - y^2}$

$$D = \left\{ (x,y) \in \mathbb{R}^2 : (x-1)^2 + y^2 \leq 1 \right\}$$

③ $f(x,y) = 3x^2 + 4y^2 - 6x - 12$

$$D = \left\{ (x,y) \in \mathbb{R}^2 : x^2 + y^2 - 4 \leq 0 \right\}$$

3. 1) Classificare i punti interni

3. 2) trovare max e min assoluti

Massimi e minimi relativi

① $F(x,y) = 3x^4 - y^6$

② $F(x,y) = x^3y + x^3 - x^2y$