Cses Summary

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November 22, 2023

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Chapter 1

Esercitazione 1

1.1 Limiti

Es

$$\lim_{\rho \to 0} \frac{\rho(|\cos^2\theta)| + |\cos^2\theta \sin\theta|)}{1} \leq \rho(1+1) = 2\rho = 0$$

Es

$$\lim_{(x,y)\to(2,-1)} \frac{(y^2 - x^2 + 3)^2}{(x-2)^2 + (y+1)^2} =$$

Primo modo $\begin{cases} \text{X} = \text{x-2} \\ \text{Y} = \text{y} + 1 \end{cases}$

Secondo modo $\begin{cases} \text{x} = 2 + \cos\theta \\ \text{y} = \text{-1} + \cos\theta \end{cases}$

$$\lim_{\rho \to 0^+} \frac{((-1+\sin\theta)^2 - (2+\cos\theta)^2 + 3)^2}{\rho\cos^2\theta + \rho^2\sin^2\theta} = \lim_{\rho\to 0^+} (\rho - 2\sin\theta - \cos\theta)^2 \Rightarrow \nexists$$