5. $\frac{z^2-\bar{z}^2}{z^2} = z-\bar{z}$ $\qquad z^2 \neq 0 \qquad a^2-b^2+2abi \neq 0$

cane

username

$z^2-\bar{z}^2 = z^2(z-\bar{z})$

3) Sia $a_n = \frac{1}{n+2} \Rightarrow \lim\limits_{n\to+\infty} a_n = 0$ Vero: $\forall \varepsilon>0\ \exists \bar{n}$ t.c. $|a_n - 0| < \varepsilon \quad \forall n>\bar{n}$

Fisso $\varepsilon>0$ piccolo a piacere. $|a_n| = \frac{1}{n+2} < \varepsilon$ Quando succede?

$\frac{1}{\varepsilon} < n+2 \qquad n > \frac{1}{\varepsilon} - 2$ Devo scegliere $\bar{n}$ t.c $\bar{n} \geq \frac{1}{\varepsilon} - 2$ e di conseguenza ho che $n > \bar{n} \geq \frac{1}{\varepsilon} - 2 \Rightarrow |a_n - 0| < \varepsilon \quad \forall n>\bar{n}$

$\varepsilon>0$

CODE

Sia $a_n = \frac{1}{n+2} \Rightarrow \lim\limits_{n\to+\infty} a_n = 0$

OTP

$\forall \varepsilon>0\ \exists \bar{n}$ t.c. $\left|\frac{1}{n+2} - 0\right| < \varepsilon \quad \forall n>\bar{n}$

$|a_n| = \frac{1}{n+2} < \varepsilon \qquad \frac{1}{\varepsilon} < n+2 \qquad n > \frac{1}{\varepsilon} - 2$ Scelgo $\bar{n}$ t.c. $\bar{n} \geq \frac{1}{\varepsilon} - 2 \Rightarrow n > \bar{n} \geq \frac{1}{\varepsilon} - 2 \Rightarrow |a_n - 0| < \varepsilon \quad \forall n>\bar{n}$

6) $a_n = 2 + \frac{n+1}{n^2+2n+1} \Rightarrow \lim\limits_{n\to+\infty} a_n = 2$ Vera

$\forall \varepsilon>0\ \exists \bar{n}$ t.c. $|a_n - a| < \varepsilon \quad \forall n>\bar{n}$ password armadillo

$\forall \varepsilon>0\ \exists \bar{n}$ t.c. $\left|2 + \frac{n+1}{n^2+2n+1} - 2\right| < \varepsilon \quad \forall n>\bar{n}$

$\left|\frac{n+1}{(n+1)^2}\right| < \varepsilon \qquad \left|\frac{1}{n+1}\right| < \varepsilon \Rightarrow \frac{1}{n+1} < \varepsilon \Rightarrow \frac{1}{\varepsilon} < n+1 \Rightarrow n > \frac{1}{\varepsilon} - 1$

Scelgo $\bar{n}$ t.c. $\bar{n} \geq \frac{1}{\varepsilon} - 1 \Rightarrow n > \bar{n} \geq \frac{1}{\varepsilon} - 1 \Rightarrow |a_n - 2| < \varepsilon \quad \forall n>\bar{n}$

codice segreto

PIN

8) $a_n = \frac{5-n}{n+1} \Rightarrow \lim\limits_{n\to+\infty} a_n = -1$ Vera DIM.

$\forall \varepsilon>0\ \exists \bar{n}$ t.c. $|a_n - (-1)| < \varepsilon \quad \forall n>\bar{n}$

$\left|\frac{5-n}{n+1} + 1\right| < \varepsilon \qquad \left|\frac{5-n+n+1}{n+1}\right| < \varepsilon \qquad \left|\frac{6}{n+1}\right| < \varepsilon \Rightarrow \frac{6}{n+1} < \varepsilon \Rightarrow \frac{6}{\varepsilon} < n+1 \Rightarrow n > \frac{6}{\varepsilon} - 1$

scelgo $\bar{n}$ t.c. $\bar{n} \geq \frac{6}{\varepsilon} - 1 \Rightarrow n > \bar{n} \geq \frac{6}{\varepsilon} - 1 \Rightarrow |a_n + 1| < \varepsilon \quad \forall n>\bar{n}$

2) $a_n = n \Rightarrow \lim\limits_{n\to+\infty} a_n = 0$ PSW

$\forall \varepsilon>0\ \exists \bar{n}$ t.c. $|a_n - 0| < \varepsilon \quad \forall n>\bar{n} \qquad \exists \bar{n}$ t.c $n < \varepsilon \quad \forall n>\bar{n}$ credenziali

Fisso ε piccolo a piacere

$|n| < \varepsilon \qquad n < \varepsilon \qquad$ sia $\varepsilon = 1 \qquad \exists \bar{n}$ t.c $n < 1 \quad \forall n>\bar{n}$ NO

credential