DOMANDE/ESERCIZI SUI LIMITI

Proposizione	Vera	Falsa
$a_n = \frac{n^2-1}{n^2+1}$ è limitata	$\square$	$\square$
$a_n = n^3 - n$ ha limite	$\square$	$\square$
$a_n = n^3 - n$ è limitata	$\square$	$\square$
$\dfrac{(-1)^n}{n+1}$ è convergente	$\square$	$\square$
$a_n = (-1)^n - n$ ha limite	$\square$	$\square$
$a_n = (-1)^n - n$ è convergente	$\square$	$\square$
$a_n = \dfrac{n(-1)^n}{n+1}$ èconvergente	$\square$	$\square$
Se $a_n = -n$, allora $a_n \to \sup a_n$	$\square$	$\square$
$\left\{\dfrac{n^2}{n-1}\right\}_{n\geq 2}$ è crescente	$\square$	$\square$
$a_n = \dfrac{(-1)^n}{n}$ è definitivamente positiva	$\square$	$\square$
$a_n = \dfrac{(-1)^n}{n}$ è frequentemente positiva	$\square$	$\square$
$a_n = \dfrac{(-1)^n}{n}$ è definitivamente minore di 10^{-1000}	$\square$	$\square$
$a_n = \dfrac{(-1)^n}{n}$ è frequentemente minore di -10^{-1000}	$\square$	$\square$

$\lim\limits_{n\to+\infty} \dfrac{n^3-3n^2+11}{2n^3+4n+7} =$	
$\lim\limits_{n\to+\infty} \dfrac{n^2+3n+1}{2n^3+4n^2+4} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt{n^3-3n^2+11}}{2n^3+4n+7} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt{2n^4+1}-\sqrt{10n^3+7}}{n^2+4n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt[3]{2n^7+1}-\sqrt{3n^5+7}}{n^2+4n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt[3]{2n^8+1}-\sqrt{3n^5+7}}{n^3-n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt{n^4+1}-n^2}{n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt{n^4+n+1}-n^2}{n+2} =$	
$\lim\limits_{n\to+\infty} \sqrt{n^4+n^2+1}-n^2 =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt{n^4+n^3+1}-n^2}{n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt[3]{n^3+1}-n}{n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt[3]{n^3+n+1}-n}{n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sqrt[3]{n^3+n^2+1}-n}{n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{3^n}{n+2} =$	

$\lim\limits_{n\to+\infty} \dfrac{3^n-4^n}{n+2} =$	
$\lim\limits_{n\to+\infty} \dfrac{3^n-5^n}{4^n(n+2)} =$	
$\lim\limits_{n\to+\infty} \dfrac{n^5}{2^n+n} =$	
$\lim\limits_{n\to+\infty} 3^{-n}(n^{100}+15) =$	
$\lim\limits_{n\to+\infty} \dfrac{\ln(n^2+1)}{\sqrt[4]{n+7}} =$	
$\lim\limits_{n\to+\infty} \dfrac{\ln^4(n^2+1)}{\sqrt[4]{n+7}} =$	
$\lim\limits_{n\to+\infty} \ln^4(1+n)-\ln(1+n^4) =$	
$\lim\limits_{n\to+\infty} \dfrac{\ln(1+n^2)+1}{\ln(1+n)+1} =$	
$\lim\limits_{n\to+\infty} \dfrac{\ln^2(1+n)+1}{\ln(1+n^5)+1} =$	
$\lim\limits_{n\to+\infty} \dfrac{3^n-n!+1}{\ln(1+n^5)+1} =$	
$\lim\limits_{n\to+\infty} \dfrac{3^n-n!+1}{5^n+6} =$	
$\lim\limits_{n\to+\infty} \dfrac{3^n-n!+1}{n!-n^n} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sin(n)+n!}{2^n+n!} =$	
$\lim\limits_{n\to+\infty} \dfrac{\sin(n)-(n+1)!}{2^n+n!} =$	