LÍMITES DE SUCESIONES

1) $\lim_{n\to\infty}(2n+5)$	2) $\lim_{n\to\infty}\left(4-\frac{2}{n}+\frac{3}{n^2}\right)$	3) $\lim_{x\to\infty}(3n^2-5n)$
4) $\lim_{n\to\infty}(-5n^2+8n-6)$	5) $\lim_{n\to\infty}\frac{2n^2-3n+5}{-3n^2+6n-7}$	6) $\lim_{n\to\infty}\frac{\sqrt{3}n^2+\sqrt{2}n+n}{-\sqrt{2}n^2+5n+2}$
7) $\lim_{n\to\infty}\frac{1000n+7}{\frac{1}{10}n^2-5n+6}$	8) $\lim_{n\to\infty}\frac{3n^5-2n^3+6n-4}{-n^6+2n^5-3n+4}$	9) $\lim_{n\to\infty}\frac{-7n\sqrt{n}+5n+6\sqrt{n}-3}{11n\sqrt{n}-4\sqrt{n}+10}$
10) $\lim_{n\to\infty}\frac{-8n\sqrt{n}+2\sqrt{n}}{\sqrt{4n^3+n^2-2}}$	11) $\lim_{n\to\infty}\frac{8n^2-5n\sqrt{n}+3n+2}{6n\sqrt{n}-2n+5}$	12) $\lim_{n\to\infty}\frac{3n^2+5n-4}{\sqrt{n^5-6}+n+7}$
13) $\lim_{n\to\infty}\frac{(3n+1)^3-(3n-1)^3}{(3n+1)(3n-1)}$	14) $\lim_{n\to\infty}\sqrt[3]{\frac{(2n+1)(5n+3)}{4n^2-3}}$	15) $\lim_{n\to\infty}\frac{\sqrt[4]{n^2+3n+1}}{\sqrt[6]{2n^3-n+5}}$
16) $\lim_{n\to\infty}\left(\frac{n^2+2}{n-1}-\frac{n^2+2n}{n+1}\right)$	17) $\lim_{n\to\infty}\left(2n-\sqrt{4n^2-3n+2}\right)$	18) $\lim_{n\to\infty}\left(\sqrt{n^2+4n+1}-\sqrt{n^2+8n+1}\right)$
19) $\lim_{n\to\infty}\left(\sqrt{2n^2+3n-3}-\sqrt{2n^2+7}\right)$	20) $\lim_{n\to\infty}\frac{\sqrt{n^3-3n^2+2}-\sqrt{n^3+1}}{\sqrt{n+2}}$	21) $\lim_{n\to\infty}\frac{1+2+3+\ldots+n}{3n^2-1}$
22) $\lim_{n\to\infty}\left(\frac{3n^2+2n-5}{4n^2+n-6}\right)^{\frac{n+2}{2n-1}}$	23) $\lim_{n\to\infty}\left(\frac{n^2+3}{2n-1}-\frac{n}{2}\right)^{\frac{n}{n^2+1}}$	24) $\lim_{n\to\infty}\left(\frac{n+9}{2n-7}\right)^{n}$
25) $\lim_{n\to\infty}\left(\frac{3n^2-4}{2n^2+n-1}\right)^{4n}$	26) $\lim_{n\to\infty}\left(\frac{n^2-5n+9}{n+10}\right)^{\frac{-n}{n+1}}$	27) $\lim_{n\to\infty}\left(\frac{2n+3}{n^2}\right)^{-n}$
28) $\lim_{n\to\infty}\left(1+\frac{1}{2}+\frac{1}{4}+\ldots+\frac{1}{2^n}\right)^{\frac{2n-1}{5n+2}}$	29) $\lim_{n\to\infty}\frac{2^n+3^n+5^n}{2^{n+1}+5^{n-2}}$	30) $\lim_{n\to\infty}\left(\frac{2^{2n}+3^{n+1}}{3^n+2^{2n-1}}\right)^{\frac{-n}{n+1}}$
31) $\lim_{n\to\infty}\left(1+\frac{1}{n}\right)^{n-5}$	32) $\lim_{n\to\infty}\left(1-\frac{1}{n}\right)^{3n}$	33) $\lim_{n\to\infty}\left(1+\frac{1}{5n}\right)^{-n}$
34) $\lim_{n\to\infty}\left(1-\frac{4}{n}\right)^{\frac{n}{4}}$	35) $\lim_{n\to\infty}\left(1+\frac{1}{3n-2}\right)^{2n-3}$	36) $\lim_{n\to\infty}\left(1+\frac{1}{n^2}\right)^{n}$
37) $\lim_{n\to\infty}\left(1+\frac{3}{\sqrt{n}-3}\right)^{n+1}$	38) $\lim_{n\to\infty}\left(\frac{4n-2}{4n-3}\right)^{4n+3}$	39) $\lim_{n\to\infty}\left(\frac{n^3+2n-1}{n^3+n^2}\right)^{n}$
40) $\lim_{n\to\infty}\left(\frac{n^3+3}{n^3-7}\right)^{n^3}$	41) $\lim_{n\to\infty}\left(1-\frac{1}{\sqrt{n}}\right)^{n+2}$	42) $\lim_{n\to\infty}\sqrt[5]{\left(\frac{3n-1}{3n+1}\right)^{n}}$
43) $\lim_{n\to\infty}\left(\frac{\sqrt{n}+3}{\sqrt{n}+7}\right)^{\sqrt{n+2}}$	44) $\lim_{n\to\infty}\left(\frac{\sqrt{n-5}}{\sqrt{n+1}}\right)^{\sqrt{n}}$	45) $\lim_{n\to\infty}\left(\frac{2-3n}{5-3n}\right)^{2n-1}$
46) $\lim_{n\to\infty}\left(\frac{5n-3}{5n+4}\right)^{\frac{n^2+n}{3n-2}}$	47) $\lim_{n\to\infty}\left(\frac{n^3+2n+5}{n^3+5n+2}\right)^{3n^2+3n+1}$	48) $\lim_{n\to\infty}\left(1+\frac{1}{n}\right)^{n\cdot\left(1+\frac{1}{n}\right)^{n}}$

LÍMITES

Calcula los siguientes límites:

1º. $\lim_{x\to\infty}\dfrac{x^3-3x+2}{x^3+x^2-5x+3}=1$

2º. $\lim_{x\to-3}\dfrac{x-4}{x^2-x-12}=-\infty$

3º. $\lim_{x\to1}\dfrac{x-1}{\sqrt{x-1}}=0$

4º. $\lim_{x\to1}\dfrac{\sqrt{x}-1}{x-1}=\dfrac{1}{2}$

5º. $\lim_{x\to3}\dfrac{x^3-27}{x^2-9}=\dfrac{9}{2}$

6º. $\lim_{x\to\infty}\dfrac{2x^4+5x^3-x^2+6}{7x^4-3x^2+4}=\dfrac{2}{7}$

7º. $\lim_{x\to\infty}\dfrac{3x^2-7}{5x^2+14x-9}=\dfrac{3}{5}$

8º. $\lim_{x\to3}\dfrac{x^2-9}{\sqrt{x}-\sqrt{3}}=12\sqrt{3}$

9º. $\lim_{x\to2}\dfrac{4-x^2}{3-\sqrt{x^2+5}}=6$

10º. $\lim_{x\to1}\dfrac{x\sqrt{x}-1}{x^2-1}=\dfrac{3}{4}$

11º. $\lim_{x\to0}\dfrac{1-\sqrt{1-x}}{x}=\dfrac{1}{2}$

12º. $\lim_{x\to\infty}\left(\sqrt{x^2-3x+2}-x\right)=-\dfrac{3}{2}$

13º. $\lim_{x\to\infty}\sqrt{x}\left(\sqrt{3+x}-x\right)=-\infty$

14º. $\lim_{x\to0}\dfrac{x}{1-\sqrt{1-x}}=2$

15º. $\lim_{x\to\infty}\dfrac{x^2-4}{x^3-3x+2}=0$

16º. $\lim_{x\to0}\dfrac{\sqrt{x+9}-3}{\sqrt{x+16}-4}=\dfrac{4}{3}$

17º. $\lim_{x\to2}\dfrac{x^2-4}{x^3-3x+2}=4$

18º. $\lim_{x\to1}\dfrac{\sqrt{5-x}-2}{x-1}=-\dfrac{1}{4}$

19º. $\lim_{x\to\infty}\left(\sqrt{x+1}-\sqrt{x}\right)=0$

20º. $\lim_{x\to0}\dfrac{\sqrt{1-x}-1}{x}=-\dfrac{1}{2}$

21º. $\lim_{x\to-2}\dfrac{2x^3+3x^2+x+6}{x^2+3x+2}=-13$

22º. $\lim_{x\to2}\dfrac{x^3-6x^2+12x-8}{x^3-8}=0$

23º. $\lim_{x\to\frac{1}{2}}\dfrac{2x+8}{2x-2}=-9$

24º. $\lim_{x\to\infty}\left(\dfrac{3x^2+4}{3x^2+5}\right)^{x^2+3}=e^{-\frac{1}{3}}$

25º. $\lim_{x\to2}\dfrac{\sqrt{x-2}}{\sqrt{x(x-2)}}=\dfrac{1}{\sqrt{2}}$

26º. $\lim_{x\to2}\dfrac{\sqrt{x+7}-3}{\sqrt{6-x}-2}=-\dfrac{2}{3}$

27º. $\lim_{x\to4}\dfrac{x-4}{x^2-x-12}=\dfrac{1}{7}$

28º. $\lim_{x\to+\infty}\left(\dfrac{2x^2-2}{5x^2+6x}\right)^{\frac{3x-1}{x+2}}=\left(\dfrac{2}{5}\right)^3$

29º. $\lim_{x\to+\infty}\left(\dfrac{3x-2}{2x+5}\right)^{x}=+\infty$

30º. $\lim_{x\to+\infty}\left(\dfrac{2x+3}{2x-5}\right)^{\frac{x^2-1}{x+2}}=e^4$

31º. $\lim_{x\to+\infty}\left(1+\dfrac{2}{x}\right)^{2x}$

32º. $\lim_{x\to+\infty}\left(\dfrac{x+2}{x}\right)^{2x}=$

33º. $\lim_{x\to+\infty}\left(\dfrac{x-1}{x+2}\right)^{\frac{x^2}{x+1}}=$

34º. $\lim_{x\to+\infty}\left(1+\dfrac{1}{x}\right)^{x^2}=$