



COGNOME _____ NOME _____

Calcola i seguenti limiti:

- | | |
|---|--|
| 1. $\lim_{x \rightarrow 8} \frac{\sqrt[3]{x} - 2}{x - 8}$ _____ / 2 | 2. $\lim_{x \rightarrow +\infty} \left(\frac{x^2 + 1}{x}\right)^\pi (1 - x)$ _____ / 2 |
| 3. $\lim_{x \rightarrow -\infty} \ln\left(\frac{2^x + 3}{2^{3-x}}\right)$ _____ / 2 | 4. $\lim_{x \rightarrow +\infty} \frac{\ln(3x - 1) - \ln 3x}{3x - 1}$ _____ / 2 |
| 5. $\lim_{x \rightarrow +\infty} \left(\frac{3x - 2}{x + 1}\right)^{\frac{x-1}{2x}}$ _____ / 2 | 6. $\lim_{x \rightarrow +\infty} \left(\frac{4x^2 - x}{x + 1}\right)^{x^2}$ _____ / 2 |
| 7. $\lim_{x \rightarrow +\infty} \log \frac{1}{x + 2}$ _____ / 2 | 8. $\lim_{x \rightarrow 0} \frac{\text{sen } x}{x^2 + 2x}$ _____ / 2 |
| 9. $\lim_{x \rightarrow 0} \frac{\text{sen } x - 2x}{\text{sen } x + x}$ _____ / 2 | 10. $\lim_{x \rightarrow +\infty} \left(\frac{x}{1 + x}\right)^{-x}$ _____ / 2 |
| 11. $\lim_{x \rightarrow +\infty} \left(\frac{x + 4}{2x + 1}\right)^x$ _____ / 2 | 12. $\lim_{x \rightarrow \frac{\pi}{2}} \log_2 \frac{\cos x + 2 \text{sen } x}{\text{ctg } x + 1}$ _____ / 2 |
| 13. $\lim_{x \rightarrow 0} \frac{2 \text{sen}(1 - e^x)}{e^x - 1}$ _____ / 2 | 14. $\lim_{x \rightarrow 0} \frac{\ln(1 + x)^{e^x}}{x}$ _____ / 2 |
| 15. $\lim_{x \rightarrow -\frac{\pi}{4}} \frac{\text{sen } x + \cos x}{\cos 2x}$ _____ / 2 | 16. $\lim_{x \rightarrow 2^+} \ln 3^{-\frac{x}{x-2}}$ _____ / 2 |
| 17. $\lim_{x \rightarrow +\infty} \left(2^{\frac{1}{x}} - 2^{\frac{x-1}{x+1}}\right)$ _____ / 2 | 18. $\lim_{x \rightarrow 2} \frac{x^3 - 4x}{x^3 - 2x^2 + x - 2}$ _____ / 2 |
| 19. $\lim_{x \rightarrow -\infty} \frac{(x + 2)^2}{(3x - 1)^2}$ _____ / 2 | 20. $\lim_{x \rightarrow 0} \frac{\ln(1 - 2x)}{x}$ _____ / 2 |
| 21. $\lim_{x \rightarrow +\infty} \left(\frac{x + 10}{x}\right)^{\frac{x}{2}}$ _____ / 2 | 22. $\lim_{x \rightarrow 0} \frac{\ln(1 + x)^2}{\text{sen } x}$ _____ / 1 |
| 23. $\lim_{x \rightarrow +\infty} \frac{2}{2 - 2\frac{x-1}{x}}$ _____ / 1 | 24. $\lim_{x \rightarrow 1} \frac{4 \text{sen } \ln x}{2^x \ln x}$ _____ / 1 |

1	2	3	4	5	6	7	8	9	10
x=0	0<x<7,5	7,5≤x<12,5	12,5≤x<17,5	17,5≤x<24	24≤x<27,5	27,5≤x<32,5	32,5≤x<37,5	37,5≤x<45	x=45

BUON LAVORO!

