

Determinare il valore dei seguenti limiti

1. $\lim_{x \rightarrow 0} \left(\frac{\log(x+1)}{x} \right)^2$
2. $\lim_{x \rightarrow 0^+} \left(\frac{e^x - 1}{x} + \log(x^5 + 3x) \right)$
3. $\lim_{x \rightarrow 0} \left(\frac{e^x - 1}{x} \right)^5$
4. $\lim_{x \rightarrow 0} \left(\frac{e^x - 1}{x} + \frac{\log(x+1)}{x} \right)$
5. $\lim_{x \rightarrow 0} \left(\frac{\log(4x^5 + 1)}{4x^5} + \frac{e^{3x} - 1}{3x} + \log(5x^2 + 4) \right)$
6. $\lim_{x \rightarrow +\infty} \left(\frac{\log(x^3 + 4x)}{3x^2 + 4} + \frac{3x^5 + 7x}{5x^3 + 2} + e^{5x^3 - 2x^2 + 1} \right)$
7. $\lim_{x \rightarrow +\infty} \left(\frac{\log(x^2 + 4)}{3x + 1} + 2xe^{5x-1} + \sqrt{x^4 + 5x^2 + 1} \right)$
8. $\lim_{x \rightarrow +\infty} \left(\frac{\log(7x + 3)}{5x^3 + 4x^2 - 7} + (3x^2 - 5x)e^{4x-1} \right)$
9. $\lim_{x \rightarrow 0} \left(\frac{\log^3(4x + 1)}{64x^3} + 16x^2 e^{5x+1} \right)$
10. $\lim_{x \rightarrow -\infty} \left(e^{3x^2 + 5x^3} + \sqrt{x^4 + 6x + 1} \right)$
11. $\lim_{x \rightarrow -1} \left(\frac{\log(x+2)}{x+1} + e^{3x+3} \right)$
12. $\lim_{x \rightarrow 2^+} \left(\frac{\log(x-2)}{3x+5} \right)$
13. $\lim_{x \rightarrow 3} \left(\frac{\log(x-2)}{x-3} + \frac{e^{3(x-3)^2} - 1}{3(x-3)^2} \right)$

14. $\lim_{x \rightarrow 4^+} \left(\frac{\log(5x - 19)}{5x - 20} + \frac{e^{x^2 - 8x + 16} - 1}{(x - 4)^2} + \sqrt{x^2 - 16} \right)$