

Esercizi su limiti di successioni - 2

Calcolare i seguenti limiti di successioni.

1. $\lim_{n \rightarrow +\infty} \frac{n^2 - \log_2(n) + 3^{-n}}{2^n + 5}$

2. $\lim_{n \rightarrow +\infty} \frac{(2^n + 2^{-n})^2 - 3^n}{5^{n/2}}$

3. $\lim_{n \rightarrow +\infty} \frac{\log_5(n+1)}{n}$

4. $\lim_{n \rightarrow +\infty} \frac{n}{\log_4 n}$

5. $\lim_{n \rightarrow +\infty} \frac{\sqrt[3]{\log_2 n}}{n}$

6. $\lim_{n \rightarrow +\infty} \frac{2^{2n-5}}{n^2 - 3^{n+1}}$

7. $\lim_{n \rightarrow +\infty} \frac{n - \sqrt{1+n^3}}{n \log_2 n}$

8. $\lim_{n \rightarrow +\infty} \frac{n - \sqrt{1+n^3}}{n \log_{1/3} n}$

9. $\lim_{n \rightarrow +\infty} \frac{\sqrt{2^n - 1} - \log_2(n^5)}{n}$

10. $\lim_{n \rightarrow +\infty} \frac{\log_3(n^{2n})}{\sqrt{n^2 + n} - n}$

11. $\lim_{n \rightarrow +\infty} \frac{3^{n-\sqrt{n}}}{2^{n+1}}$

12. $\lim_{n \rightarrow +\infty} \frac{\sqrt{4^n + n^4} - 2^n}{3^{n/2}}$

13. $\lim_{n \rightarrow +\infty} \frac{2^n}{3^{\sqrt{n}}}$

14. $\lim_{n \rightarrow +\infty} \frac{n \log_3(\sqrt{n} + 1)}{\sqrt{n^2 - 2n}}$