

Esercizi di riepilogo

■ Calcola i seguenti limiti.

444 $\lim_{x \rightarrow 0^+} \frac{\ln(1 + \operatorname{tg} x)}{2^{\frac{1}{x}}}$ [0]

445 $\lim_{x \rightarrow 0^+} \left(\sqrt[10]{x} \ln \sqrt[3]{x} \right)$ *

446 $\lim_{x \rightarrow 1} \frac{\operatorname{sen}(x^2 - 5x + 4)}{e^{x^3-1} - 1}$ [-1]

447 $\lim_{x \rightarrow +\infty} \frac{12x^5 + 3xe^{-x} + \ln x}{x^6 \operatorname{sen} \frac{1}{x}}$ [12]

448 $\lim_{x \rightarrow -\infty} \frac{-10x^2 - 3x^4 + x^3 - 3}{-7x^2 + 2x^4 - 3}$ $[-\frac{3}{2}]$

449 $\lim_{x \rightarrow 0^-} \left(\frac{1}{\operatorname{tg} x} \right)^{4-3 \operatorname{sen} x}$ $[+\infty]$

450 $\lim_{x \rightarrow 1} \frac{\sqrt{x^2 + 3x + 5} - 3}{x^3 - x^2 + x - 1}$ $[\frac{5}{12}]$

451 $\lim_{x \rightarrow -\infty} \ln \left(1 - e^{2x} + \operatorname{sen} \frac{1}{x} \right)$ [0]

452 $\lim_{x \rightarrow 0} \frac{\cos(4x) - \cos(2x)}{\cos(7x) - \cos(3x)}$ $[\frac{3}{10}]$

453 $\lim_{x \rightarrow 0} (\cos x - \operatorname{sen} x)^{\frac{5-x}{\operatorname{tg} x}}$ $[\frac{1}{e^5}]$

454 $\lim_{x \rightarrow 0^+} \left(\frac{1}{\sqrt{3x}} \right)^{\frac{5x-1}{3+x}}$ [0]

455 $\lim_{x \rightarrow 0^+} (\operatorname{sen} x)^{\frac{1}{\ln \operatorname{tg} x}}$ [e]

456 $\lim_{x \rightarrow \frac{\pi}{2}} \frac{1 - \operatorname{sen} x}{\ln^2 \operatorname{tg} \frac{x}{2}}$ $[\frac{1}{2}]$

457 $\lim_{x \rightarrow -\infty} (x^7 2^x)$ [0]