

Calcolare, se esistono, i *limiti* che seguono

$$1) \lim_{x \rightarrow -\infty} \frac{e^x - 1}{x} \quad [0]$$

$$2) \lim_{x \rightarrow -\infty} \frac{\cos(x)}{x} \quad [0]$$

$$3) \lim_{x \rightarrow 0} \frac{\sin(3x)}{5x} \quad [3/5]$$

$$4) \lim_{x \rightarrow 0} \frac{e^{3x} - 1}{x} \quad [3]$$

$$5) \lim_{x \rightarrow +\infty} \frac{x^2 - 3 \log(x)}{4x^2 + 2 \log(x)} \quad [1/4]$$

$$6) \lim_{x \rightarrow +\infty} \frac{\sqrt{9x^2 + 2} - 3x}{\sqrt{25x^2 + 8} - 5x} \quad [5/12]$$

$$7) \lim_{x \rightarrow +\infty} \frac{x^2 + 2}{x - 3} \quad [+\infty]$$

$$8) \lim_{x \rightarrow +\infty} \sin(x) \sin\left(\frac{1}{x}\right) \quad [0]$$

$$9) \lim_{x \rightarrow 0} \frac{\sin(3x)}{\sin(7x)} \quad [3/7]$$

$$10) \lim_{x \rightarrow +\infty} (\sqrt{x^2 + 1} - \sqrt{x - 1}) \quad [+\infty]$$