

APPLICAZIONI DEL TEOREMA DI DE L'HÔPITAL AL CALCOLO DEI LIMITI

		RISULTATI	
9 ¹⁾ $\lim_{x \rightarrow 0} \frac{\sin 2x}{x}$	9 ²⁾ $\lim_{x \rightarrow 0} \frac{\cos 3x - \cos 5x}{x^2}$	2	8
10 ¹⁾ $\lim_{x \rightarrow 0} \frac{1 - \cos x}{\sin^2 x}$	10 ²⁾ $\lim_{x \rightarrow 0} \frac{\lg 2x - \lg 5x}{7x^2}$	$\frac{1}{2}$	$\frac{10}{7}$
11 ¹⁾ $\lim_{x \rightarrow \frac{\pi}{2}} \frac{\cos x}{x}$	11 ²⁾ $\lim_{x \rightarrow 1} (x-1) \cotg \pi x$	0	$\frac{8}{\pi}$
12 ¹⁾ $\lim_{x \rightarrow 0} \frac{3x^3 + 2 \lg^2 x}{2x^4 - 3 \ln^2 x}$	12 ²⁾ $\lim_{x \rightarrow +\infty} \frac{3x^3 + 2 \cos^2 x}{2x^3 + 3 \ln^2 x}$	$-\frac{2}{3}$	$\frac{3}{2}$
13 ¹⁾ $\lim_{x \rightarrow \frac{\pi}{2}} \frac{\cotg x}{x - \frac{\pi}{2}}$	13 ²⁾ $\lim_{x \rightarrow \frac{\pi}{2}} \frac{1 + \cos 2x}{(\frac{\pi}{2} - x)^2}$	-1	2
14 ¹⁾ $\lim_{x \rightarrow \frac{\pi}{4}} \frac{\sin x - \cos x}{x - \frac{\pi}{4}}$	14 ²⁾ $\lim_{x \rightarrow 1} \frac{\lg \frac{\pi x}{4} - \cotg \frac{\pi x}{6}}{x-1}$	$\sqrt{2}$	π
23 ^{*)} $\lim_{x \rightarrow 0} \frac{1 - \cos(1 - \cos x)}{x^4}$	$\lim_{x \rightarrow 0} \frac{\ln(1 + 5x)}{e^{2x} - 1}$	$\frac{1}{8}$	$\frac{5}{2}$
$\lim_{x \rightarrow 0} \frac{\ln(1 + \sin x)}{1 - e^{-x}}$	$\lim_{x \rightarrow 0} \frac{\ln \cot x}{x^2}$	1	$-\frac{1}{2}$
$\lim_{x \rightarrow 0} \frac{e^{3x} - 1 - 3x}{\sin^2 x}$	$\lim_{x \rightarrow 0} \frac{\lg(2x)}{\ln(1 + 3x)}$	$\frac{9}{2}$	$\frac{2}{3}$