

Vypočítejte následující limity:

$$\lim_{x \rightarrow 1} \frac{x^3 - 3x + 2}{x^4 - 4x + 3} = \frac{1}{2}$$
$$\lim_{x \rightarrow 0} \frac{\sqrt{1+x} - \sqrt{1-x}}{x} = 1$$
$$\lim_{x \rightarrow 0} \frac{\sin x}{x^3} = +\infty$$
$$\lim_{x \rightarrow \infty} \frac{\sqrt{x-2}}{\sqrt[3]{x^4 - 3x^2 + 1}} = 0$$
$$\lim_{x \rightarrow 0} \frac{e^x - e^{-x}}{\sin 2x} = 1$$
$$\lim_{x \rightarrow -\infty} \frac{x^3 - 2x + 1}{x^2 - 3x + 5} = -\infty$$
$$\lim_{x \rightarrow 3} \frac{x}{(x-3)^2} = +\infty$$
$$\lim_{x \rightarrow 0} \frac{\ln(7x+1) + e^{2x} - 1}{x} = 9$$
$$\lim_{x \rightarrow 0} \frac{\sin 2x}{\sin 3x} = \frac{2}{3}$$
$$\lim_{x \rightarrow 0} \frac{x+1}{x^2 - 3x + 2} = neex$$
$$\lim_{x \rightarrow 0} x \cdot \cot g 3x = \frac{1}{3}$$
$$\lim_{x \rightarrow \infty} (\sqrt{x^2 + x} + x) = +\infty$$
$$\lim_{x \rightarrow \infty} (\sqrt{x^2 + x} - x) = \frac{1}{2}$$