

Limity posloupností

$$(1) \lim_{n \rightarrow \infty} \frac{n^2 - 1}{2n^2 - n - 1}$$

$$(2) \lim_{n \rightarrow \infty} \frac{10000n}{n^2 + 1}$$

$$(3) \lim_{n \rightarrow \infty} \frac{n^2 + 2}{n + 10000}$$

$$(4) \lim_{n \rightarrow \infty} \frac{(n+1)^5}{2n^5 + \pi n^2 + \ln 2}$$

$$(5) \lim_{n \rightarrow \infty} \frac{\sqrt{n^2 + 1} + 3}{3n + 100}$$

$$(6) \lim_{n \rightarrow \infty} \frac{\sqrt[3]{n^2} \sin(n!)}{n+1}$$

$$(7) \lim_{n \rightarrow \infty} (\sqrt{n+1} - \sqrt{n})$$

$$(8) \lim_{n \rightarrow \infty} \sqrt[3]{n^3 + n^2 + 1} - \sqrt[3]{n^3 - n^2 + 1}$$

$$(9) \lim_{n \rightarrow \infty} e^{\frac{n^2 + \sin n}{(n+2)^2 + 1}}$$

$$(10) \lim_{n \rightarrow \infty} \frac{2^n + 3^n}{2^{n+1} + 3^{n+1}}$$