

$$445. \lim_{x \rightarrow 1} \frac{\sqrt{1-2x-x^2} - (1+x)}{x}$$

$$446. \lim_{x \rightarrow 0} \frac{\sqrt[3]{8+3x-x^2} - 2}{x+x^2}$$

$$447. \lim_{x \rightarrow 0} \frac{\sqrt[3]{27+x} - \sqrt[3]{27-x}}{x+2\sqrt[3]{x^4}}$$

$$448. \lim_{x \rightarrow 0} \frac{\sqrt{1+x} - \sqrt{1-x}}{\sqrt[3]{1+x} - \sqrt[3]{1-x}}$$

$$449. \lim_{x \rightarrow 7} \frac{\sqrt{x+2} - \sqrt[3]{x+20}}{\sqrt[4]{x+9} - 2}$$

$$450. \lim_{x \rightarrow 0} \frac{\sqrt[3]{1+\frac{x}{3}} - \sqrt[4]{1+\frac{x}{4}}}{1 - \sqrt{1-\frac{x}{2}}}$$

$$451. \lim_{x \rightarrow 0} \frac{x^2}{\sqrt[5]{1+5x} - (1+x)}$$

$$452. \lim_{x \rightarrow 0} \frac{\sqrt[m]{1+\alpha x} - \sqrt[n]{1+\beta x}}{x}$$

m, n - celá čísla

$$453. \lim_{x \rightarrow 0} \frac{\sqrt[m]{1+\alpha x} \sqrt[n]{1+\beta x} - 1}{x}$$

m, n - celá čísla

$$455.1. \lim_{x \rightarrow 1} \left(\frac{3}{1-\sqrt{x}} - \frac{2}{1-\sqrt[3]{x}} \right)$$

$$456. \lim_{x \rightarrow 1} \frac{(1-\sqrt{x})(1-\sqrt[3]{x}) \dots (1-\sqrt[n]{x})}{(1-x)^{n-1}}$$

$$457. \lim_{x \rightarrow +\infty} [\sqrt{(x+a)(x+b)} - x]$$

$$458. \lim_{x \rightarrow +\infty} (\sqrt{x + \sqrt{x + \sqrt{x}}} - \sqrt{x})$$

$$459. \lim_{x \rightarrow +\infty} x(\sqrt{x^2+2x} - 2\sqrt{x^2+x} + x)$$

$$460. \lim_{x \rightarrow +0} \left(\sqrt{\frac{1}{x} + \sqrt{\frac{1}{x} + \sqrt{\frac{1}{x}}}} - \sqrt{\frac{1}{x}} - \sqrt{\frac{1}{x} + \sqrt{\frac{1}{x}}} \right)$$

$$461. \lim_{x \rightarrow \infty} (\sqrt[3]{x^3+x^2+1} - \sqrt[3]{x^3-x^2+1})$$

$$462. \lim_{x \rightarrow +\infty} (\sqrt[3]{x^3+3x^2} - \sqrt{x^2-2x})$$

$$463. \lim_{x \rightarrow \infty} x^{\frac{1}{3}} [(x+1)^{\frac{2}{3}} - (x-1)^{\frac{2}{3}}]$$

$$464. \lim_{x \rightarrow +\infty} x^{\frac{3}{2}} (\sqrt{x+2} - 2\sqrt{x+1} + \sqrt{x})$$

$$465. \lim_{x \rightarrow +\infty} [\sqrt[n]{(x+a_1) \dots (x+a_n)} - x]$$

$$466. \lim_{x \rightarrow +\infty} \frac{(x - \sqrt{x^2-1})^n + (x + \sqrt{x^2-1})^n}{x^n}$$

n - přirozené číslo

$$467. \lim_{x \rightarrow 0} \frac{(\sqrt{1+x^2} + x)^n - (\sqrt{1+x^2} - x)^n}{x}$$

n - přirozené číslo