

$$1345. \lim_{x \rightarrow -0} x^{k/(1+\ln x)}. \quad 1346. \lim_{x \rightarrow 1} x^{1/(1-x)}.$$

$$1347. \lim_{x \rightarrow 1} (2-x)^{\operatorname{tg} \pi x/2}. \quad 1348. \lim_{x \rightarrow \frac{\pi}{4}} (\operatorname{tg} x)^{\operatorname{tg} 2x}.$$

$$1349. \lim_{x \rightarrow 0} (\operatorname{ctg} x)^{\sin x}. \quad 1350. \lim_{x \rightarrow +0} \left( \ln \frac{1}{x} \right)^x.$$

$$1351. \lim_{x \rightarrow \infty} \left( \operatorname{tg} \frac{\pi x}{2x+1} \right)^{1/x}. \quad 1352. \lim_{x \rightarrow 0} \left( \frac{\operatorname{tg} x}{\operatorname{tg} a} \right)^{\operatorname{ctg}(x-a)}.$$

$$1353. \lim_{x \rightarrow 0} \left( \frac{a^x - x \ln a}{b^x - x \ln b} \right)^{1/x^2}. \quad 1354. \lim_{x \rightarrow 0} \left( \frac{1}{x} - \frac{1}{e^x - 1} \right).$$

$$1355. \lim_{x \rightarrow 1} \left( \frac{1}{\ln x} - \frac{1}{x-1} \right). \quad 1356. \lim_{x \rightarrow 0} \left( \operatorname{ctg} x - \frac{1}{x} \right).$$

$$1357. \lim_{x \rightarrow 0} \left[ \frac{1}{\ln(x + \sqrt{1+x^2})} - \frac{1}{\ln(1+x)} \right].$$

$$1358. \lim_{x \rightarrow a} \frac{a^x - x^a}{x - a} \quad (a > 0). \quad 1359. \lim_{x \rightarrow 0} \frac{(1+x)^{1/x} - e}{x}.$$

$$1360. \lim_{x \rightarrow 0} \frac{(a+x)^x - a^x}{x^2} \quad (a > 0).$$

$$1361. \lim_{x \rightarrow +\infty} \left( \frac{2}{\pi} \operatorname{arctg} x \right)^x. \quad 1362. \lim_{x \rightarrow +\infty} (\operatorname{th} x)^x.$$

$$1363. \lim_{x \rightarrow 0} \left( \frac{\arcsin x}{x} \right)^{1/x^2}. \quad 1363.1. \lim_{x \rightarrow 0} \left( \frac{\sin x}{x} \right)^{1/x^2}.$$

$$1363.2. \lim_{x \rightarrow 0} \left( \frac{\operatorname{tg} x}{x} \right)^{1/x^2} \quad 1363.3. \lim_{x \rightarrow 0} \left( \frac{\operatorname{arctg} x}{x} \right)^{1/x^2}.$$

$$1363.4. \lim_{x \rightarrow 0} \left( \frac{\operatorname{Arsh} x}{x} \right)^{1/x^2}, \quad \text{где } \operatorname{Arsh} x =$$

$$\ln(x + \sqrt{1+x^2}).$$

$$1364. \lim_{x \rightarrow 0} \left[ \frac{(1+x)^{1/x}}{e} \right]^{1/x}. \quad 1365. \lim_{x \rightarrow 0} \left( \frac{2}{\pi} \arccos x \right)^{1/x}.$$

$$1366. \lim_{x \rightarrow 0} \left( \frac{\cos x}{\operatorname{ch} x} \right)^{1/x^2}. \quad 1367. \lim_{x \rightarrow 0} \frac{\ln \operatorname{ch} x}{\sqrt[m]{\operatorname{ch} x} - \sqrt[n]{\operatorname{ch} x}}.$$

$$1368. \lim_{x \rightarrow 0} \left( \frac{1+e^x}{2} \right)^{\operatorname{cth} x}. \quad 1368.1. \lim_{x \rightarrow +\infty} \frac{x^{\ln x}}{(\ln x)^x}.$$

$$1369. \lim_{x \rightarrow +\infty} \left[ \sqrt[3]{x^3 + x^2 + x + 1} - \sqrt{x^2 + x + 1} \cdot \frac{\ln(e^x + x)}{x} \right].$$