$$\lim_{n\to\infty} \frac{\left(\frac{n+2}{n+1}\right)^n \cdot \left(e^{\left(\sin\frac{1}{n}\right)} - 1\right)}{n \cdot \sin\left(\frac{e^2}{n^2}\right)} \qquad \left[\frac{1}{e}\right]$$

$$\lim_{x\to 0+} \frac{\sin\left(\sin\left(x^{\frac{2}{3}}\right)\right) \cdot \operatorname{arctg}\left(x+1\right)}{\sqrt[3]{\frac{1}{x}+2\pi} - \sqrt[3]{\frac{1}{x}+\pi}} \qquad \left[\frac{3}{4}\right]$$