

(١) $\lim_{x \rightarrow -\infty} \sqrt{x^{\mathfrak{z}} + \mathfrak{z}} - \sqrt{x^{\mathfrak{z}} - \mathfrak{z}} x$

(٢) $\lim_{n \rightarrow +\infty} \frac{\mathfrak{z}}{n} \left(\cosh \frac{\mathfrak{z}}{n} + \cdots + \cosh \mathfrak{z} \right)$

(٥) $\lim_{n \rightarrow +\infty} \sqrt[n]{\frac{((\mathfrak{z}n)!)^{\mathfrak{z}}}{n!(\mathfrak{z}n)!}}$

(٧) $\lim_{n \rightarrow +\infty} \left[\ln \left(\mathfrak{z} + \frac{\mathfrak{z}}{n} \right)^{\frac{1}{n}} + \ln \left(\mathfrak{z} + \frac{\mathfrak{z}}{n} \right)^{\frac{1}{n}} + \cdots + \ln \mathfrak{z}^{\frac{1}{n}} \right]$

(٩) $\int_{-\mathfrak{z}}^{\mathfrak{z}} [|x|] d|x|$

(٢) $\sum_{n=\circ}^{\infty} \frac{(-\mathfrak{z})^n \mathfrak{z}^n \pi^{\mathfrak{z}n}}{(\mathfrak{z}n)!}$

(٤) $\lim_{x \rightarrow \circ+} \left(\frac{a^{x^{\mathfrak{z}}} + b^{x^{\mathfrak{z}}}}{a^x + b^x} \right)^{\frac{1}{x}}$

(٦) $z^{\mathfrak{z}} = \frac{\left(\cos \frac{\mathfrak{z}\pi}{\mathfrak{z}} + i \sin \frac{\mathfrak{z}\pi}{\mathfrak{z}} \right)^{\mathfrak{z}}}{\left(\cos \frac{\pi}{\mathfrak{z}} - i \sin \frac{\pi}{\mathfrak{z}} \right)^{\mathfrak{z}}}$ (1)

(٨) $\int_{\mathfrak{z}}^{\infty} \frac{\ln x}{\sqrt{x}(\mathfrak{z} + x^{\mathfrak{z}})} dx$