

$$2633. \sum_{n=1}^{\infty} \left( n^{\frac{1}{n^2+1}} - 1 \right). \quad 2634. \sum_{n=1}^{\infty} e^{\frac{a \ln n + b}{c \ln n + d}}.$$

$$2635. \sum_{n=1}^{\infty} \frac{1}{\ln^2 \left( \sin \frac{1}{n} \right)}.$$

$$2636. \sum_{n=1}^{\infty} \left( \cos \frac{a}{n} \right)^{n^2}.$$

$$2637. \sum_{n=3}^{\infty} \ln \left( \frac{\operatorname{ch} \frac{\pi}{n}}{\cos \frac{\pi}{n}} \right).$$

$$2638. \sum_{n=1}^{\infty} \frac{n!}{n^{\sqrt{n}}}. \quad 2639. \sum_{n=2}^{\infty} \frac{n! r n}{(\ln n)^n}.$$

$$2640. \sum_{n=1}^{\infty} \left( a^{1/n} - \frac{b^{1/n} + c^{1/n}}{2} \right) \quad (a > 0, b > 0, c > 0).$$

$$2641. \sum_{n=1}^{\infty} (n^{n^{\alpha}} - 1).$$

$$2642. \sum_{n=1}^{\infty} \left[ \ln \frac{1}{n^{\alpha}} - \ln \left( \sin \frac{1}{n^{\alpha}} \right) \right].$$

$$2643. \sum_{n=1}^{\infty} a^{-(b \ln n + c \ln^2 n)} \quad (a > 0).$$

$$2644. \sum_{n=1}^{\infty} \frac{n^{2n}}{(n+a)^{n+b} (n+b)^{n+a}} \quad (a > 0, b > 0).$$

$$2645. \sum_{n=1}^{\infty} \frac{[(n+1)!]^n}{2! \cdot 4! \cdot \dots \cdot (2n)!}.$$

Исследовать сходимость рядов  $\sum_{n=1}^{\infty} u_n$  со следующими общими членами: