

一类级数的和

Abel

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$$\sum_{n=1}^{\infty} \frac{1}{n^2} = \frac{1}{6} \pi^2$$

$$\sum_{n=1}^{\infty} \frac{1}{n^4} = \frac{1}{90} \pi^4$$

$$\sum_{n=1}^{\infty} \frac{1}{n^6} = \frac{1}{945} \pi^6$$

$$\sum_{n=1}^{\infty} \frac{1}{n^8} = \frac{1}{9450} \pi^8$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{10}} = \frac{1}{93555} \pi^{10}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{12}} = \frac{691}{638512875} \pi^{12}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{14}} = \frac{2}{18243225} \pi^{14}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{16}} = \frac{3617}{325641566250} \pi^{16}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{18}} = \frac{43867}{38979295480125} \pi^{18}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{20}} = \frac{174611}{1531329465290625} \pi^{20}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{22}} = \frac{155366}{13447856940643125} \pi^{22}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{24}} = \frac{236364091}{201919571963756521875} \pi^{24}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{26}} = \frac{1315862}{11094481976030578125} \pi^{26}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{28}} = \frac{6785560294}{564653660170076273671875} \pi^{28}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{30}} = \frac{6892673020804}{5660878804669082674070015625} \pi^{30}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{32}} = \frac{7709321041217}{62490220571022341207266406250} \pi^{32}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{34}} = \frac{151628697551}{12130454581433748587292890625} \pi^{34}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{36}} = \frac{26315271553053477373}{20777977561866588586487628662044921875} \pi^{36}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{38}} = \frac{308420411983322}{2403467618492375776343276883984375} \pi^{38}$$

$$\sum_{n=1}^{\infty} \frac{1}{n^{40}} = \frac{261082718496449122051}{20080431172289638826798401128390556640625} \pi^{40}$$