Mathematical计算过程和结果

Summation Expression The summation expression is given by

$$\sum_{n=1}^{\infty} \frac{1}{n^3 + n^2}$$

with the result

$$-1 + \frac{\pi^2}{6}.$$

Integral Expression The integral expression is given by

$$\int_0^{\infty} \frac{\sqrt{x} \cdot \log(x)}{(x+1)^2} \, dx$$

with the result

$$\pi.$$