UC Merced Applied Math Problem of the Month
September 2023

Find the exact values of these series. How can you justify your answer?

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

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

By the way, are you sure that these series converge? How do you know?

To submit your solutions for a chance to win an Amazon gift card, and to find out detailed contest rules,

- scan the QR code to the right, or
- go to https://appliedmath.ucmerced.edu/news-events/problem-month