Number Theory: Series

Key words:

1. Series
2. Double integrals

Solve the following Questions:

1. Prove the following Theorem:

   Theorem 1

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

2. Discuss the rate of the convergence of the above series.

Mathematician in Focus Leonhard Euler