Infinite Sequences and Series

H. Ryott Glayzer

23rd February 2024

$$\pi = \sum_{n=0}^{\infty} \frac{(-1)^n}{2n+1}$$

1 Infinite Sequences

A sequence is a list of numbers in a given order, such as:

$$a_1, a_2, a_3, a_4, a_5, \ldots, a_n$$

These are often represented sort of like functions:

$$a_n = \sqrt{n}, \qquad b_n = (-1)^{n+1}\frac{1}{n}$$

2 Partial Sums of Sequences