

Infinite Series

How do you determine if a sequence converges or diverges?

To determine if a sequence (a_n) converges or diverges you take a limit.

If $\lim_{n \rightarrow \infty} a_n = L$ Then a_n converges to L .

If $\lim_{n \rightarrow \infty} a_n = \begin{matrix} \rightarrow \text{dne} \\ \rightarrow \infty \\ \rightarrow -\infty \end{matrix}$ Then a_n diverges