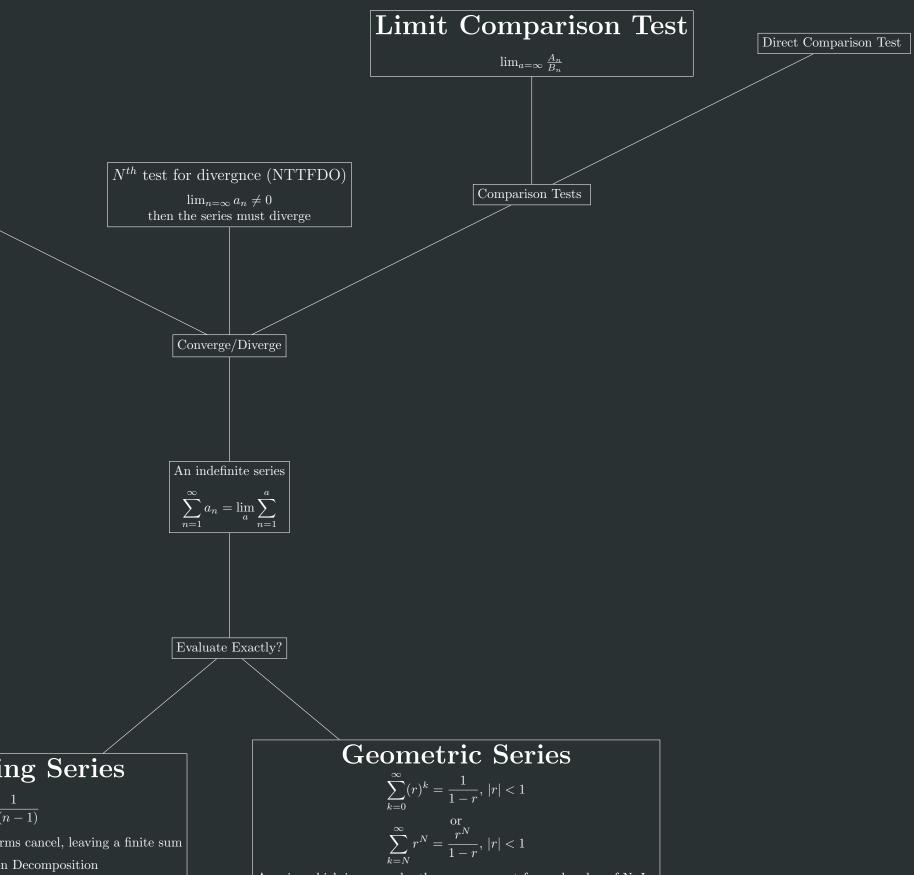


 $\sum_{n=1}^{\infty} a_n$ diverges if and only if $\int_1^{\infty} f(x) dx$ diverges. Conditions for the Integral Test

I) Must be continous for all values of x II) Must be positive III) Must be decreasing



Telescoping Series

A series where intermediate terms cancel, leaving a finite sum - Partial Fraction Decomposition

- Find Equation for S_n

- $\lim_{n\to\infty} S_n$

A series which increases by the same amount for each value of N. Ie. $\frac{A_{n+1}}{A_n} = L, \text{ where L is a number}$ Note: This does not converge for values of r greater than 1