

Convergence of $\sum a_n$?

$a_n \rightarrow 0$?

Yes / No

$a_n \geq 0$?

$\sum a_n$ div

- Tests {
- Comparison
 - Limit
 - Ratio
 - Root
 - Integral

$\sum |a_n|$ cv ? (Use comparison, limit, Ratio, Root, integral tests to study cv of $\sum |a_n|$).

Yes / No

$\sum a_n$ cv
(cv absolutely)

$\sum a_n$ alternating ?

Yes / No

Alternating test works ?

Complicated.
(Study partial sums)

Allows you to conclude whether or not $\sum a_n$ cv.

Yes / No

$\sum a_n$ cv
(cv conditionally)

Complicated.
(study partial sums)

(If no test is conclusive study partial sums)