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Raabe's criteria

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Related topic ASeriesRelatedToHarmonicSeries

Theorem. The series $a_1+a_2+a_3+\cdots$ with positive is

 \bullet convergent if, starting from some value of n, its fulfil the condition

$$\frac{a_{n+1}}{a_n} \le 1 - \frac{\mu}{n}$$

where μ is a and > 1;

 \bullet divergent if, starting from some value of n, its fulfil the condition

$$\frac{a_{n+1}}{a_n} \geqq 1 - \frac{1}{n} - \frac{M}{n^2}$$

where M is a .