

Convergence Tests Flow Chart

TOOLBOX

$\sum \frac{1}{n}$ Harmonic – diverges

$\sum a \cdot r^n$ Geometric –
converges if $|r| < 1$

$$S = \frac{a}{1-r}$$

$\sum \frac{1}{n^p}$ P-series –
converges if $p > 1$

DCT = Direct
Comparison Test

LCT = Limit
Comparison Test

AST = Alternating
Series Test

