9.1 Sequences, 9.2 Geometric Series, 9.3 Terms $\not\to 0$, Linearity, Integral

Test	useful when	converges if	diverges if
Terms not Going to 0	$\sum a_n$, $a_n \not\to 0$	NA: ~~$a_n \to 0$~~ use another test inconclusive	$a_n \not\to 0$
Infinite Geometric Series	$\sum_0^\infty ax^n$ x constant ratio a starting value	$\lvert x\rvert<1$	$\lvert x\rvert \geq 1$
Finite Geometric Series		always	
Linearity	$\sum a_n+b_n$	both conv	only 1 div
Integral Test	a_n decreasing, >0 eventually known $\int$	$\int^\infty a_n dn$ converges	$\int^\infty a_n dn$ diverges