Strategy guide: *Tests for Series Convergence*

Technique	Basic idea	When to try it	Reason for using it
Overall strategy	*Try different tests until you get a conclusive answer.*	*To determine whether or not an infinite series converges at all.*	*You want to know if a series actually has a meaningful value.*
Divergence Test (or Limit Test)	It can never converge if the sums don't get smaller.	First thing to check!	Makes some *divergent* series easy to spot. Relatively quick.
Comparison Test (and Asymptotic Comparison Test)			
Alternating Series Test			
Integral Test			
Ratio Test			
Root Test			