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**Robert P Webber\*** ([webberrp@longwood.edu](mailto:webberrp@longwood.edu)), Math and Computer Science Department, 201 High Street, Longwood University, Farmville, VA 23909. *Finding the Sum of an Infinite Series*.

Calculus reform, with its emphasis on numerical results, has altered how we teach infinite series. Historically, most classroom work on series focused on convergence tests. Actually finding the sum was computationally infeasible and thus was largely ignored, except for geometric and alternating series. Today's technology allows us to find the sum of many other convergent series to within any desired accuracy, usually by adding up the first finite number of terms and getting a bound on the sum of the remaining terms. Now when those pesky engineering students in the back of the room ask, "OK, so the series converges. What is the sum?", we can show them how to find the answer.

This presentation will discuss some of the approximation results and where (and if) they are included in popular calculus texts. (Received September 08, 2010)