

962-B1-592

**Holly Hirst\*** ([hph@math.appstate.edu](mailto:hph@math.appstate.edu)), Department of Mathematical Sciences, 329 Walker Hall, Boone, NC 28608. *Fractals in the Liberal Arts Classroom.*

Fractals are excellent motivational tools for mathematics courses in which basic geometry, algebra, number theory, functions or limits are being introduced or reviewed. They can be used to demonstrate mathematical principles such as length, area, limits, sequences, infinity, iteration, recursion and probability while capturing students' interests with tantalizing images. Fractals also – when accompanied by easy-to-use fractal generators – encourage students to explore and conjecture as well as express their individual creativity. This presentation explores incorporating fractals into math courses from middle school through pre-calculus, focusing on using fractals as an enrichment topic in a freshman liberal arts course. Fractal tools freely available for use via the world wide web will be demonstrated. (Received September 15, 2000)