CWSF 2010 - Peterborough, Ontario

Steven Zheng

A Statistical Approach to the Applications of Fractal Geometry

Division: Physical & Mathematical Sciences
Category: Intermediate
Region: Greater Vancouver
City: Richmond, BC
School: R C Palmer Secondary

Abstract: I wanted to find an automatic method to calculate the area, volume or numerical value to evaluate and analyze natural patterns. Most importantly, I want to apply this method to science. The method was derived from geometric progression but modified so that it includes the value of the original shape of a fractal set. By applying the formulaA_T=k (1 a[1-r^l]/(1-r)) and other variants.

Biography
I have always been a problem solver, even before I could remember. My hobbies range from reading to math, puzzles to poetry and music, building models to stamp collecting, ping pong and baseball. At school, I affiliate in the debate club, math club, science teams and engineering club. Most of all, I am a thinker and a worker.

Awards	Value
Discovery Channel Math Award Sponsor: Discovery Channel	$750
Total	$750