

1154-52-1574

Jeewoo Lee* (jlee1397@townsendharris.org), 240-19 69th Ave, Little Neck, NY 11362, and
Kelvin Kim (kelvin2kim@gmail.com), 19 Peach Hill Ct, Ramsey, NJ 07446. *The Largest Angle
Bisection Procedure.*

The *largest angle bisection* procedure is the operation which partitions a given triangle, T , into two smaller triangles by constructing the angle bisector of the largest angle of T . Applying the procedure to each of these two triangles produces a partition of T into four smaller triangles. Continuing in this manner, after n iterations, the initial triangle is divided into 2^n small triangles. We prove that as n approaches infinity, the diameters of all these 2^n triangles tends to 0, the smallest angle of all these triangles is bounded away from 0, and that, with the exception of T being an isosceles right triangle, the number of dissimilar triangles is unbounded. (Received September 16, 2019)