

**Summary:**

In this Project; we put  $n$  identical polygons, draw a line between the lower left most point and upper right most point then calculate the ratio between surface area above said line and surface area below said line. We started with triangles, then expanded it to trapezoids. Then we calculated it for regular pentagons by using the fact that a regular pentagon is an isosceles triangle sitting on an isosceles trapezoid. Then we calculated a similar ratio for  $n$  identical pyramids with a convex base and a plane intersecting with said pyramids. The calculation of pyramids are done by using the fact that volume of a pyramid is one third of multiplication of its base's surface area and its height. The surface area of the bases were calculated using an integral.