

# POW #7 - Geometry

## Building a Regular Hexagon [Problem #3675]

If you put a square on each side of an equilateral triangle and connect the outside vertices, you get a hexagon. However, this hexagon isn't regular.



A regular hexagon *can* be made with certain rectangles that are not squares. What are the dimensions of those rectangles if the sides of the equilateral triangle have a length of 1 unit?

**Extra:** Prove that the sides of the isosceles triangles formed are on the same line as the diagonals of the rectangles.