

Plato's Timaeus vs. On Nature, Book 14

Post by “Bryan” of February 5, 2025 at 3:31 PM

I think that part of Plato's argument is that the simplest possible plane is a triangle: therefore, this shape is properly considered the most basic building block for extending into three-dimensional space. Before we go 3D, Plato starts with a 30-60-90 triangle and -- from *six* of those -- and builds an equilateral triangle.

[54d] "In the next place we have to explain the form in which each Kind has come to exist and the numbers from which it is compounded. First will come that form which is primary and has the smallest components, and the element thereof is that triangle which has its hypotenuse twice as long as its lesser side. And when a pair of such triangles are joined along the line of the hypotenuse, and this is done thrice, by drawing the hypotenuses [54e] and the short sides together as to a center, there is produced from those triangles, six in number, one equilateral triangle."