

Abstract

One of the most known and important geometric proposition within mathematics is the one called Pythagoras theorem, Throughout the years it has been the theme of study among prominent mathematicians. This paper will focus on explaining methods that can be used to generate non-proportional triples that satisfy the Pythagoras equation $a^2 + b^2 = c^2$, where a , b , and c are integers. Furthermore, we will extend our study by branching into the the concept called congruent numbers, which is the study of the area of a right-angled triangle.

Keywords: Primitive, co-prime, triples, congruent, parity