

Amitabha Tripathi,
On Pythagorean Triples Containing a Fixed Integer,
Fibonacci Quart. **46/47** (2008/2009), no. 4, 331–340.

Abstract

For a given positive integer n , we determine explicit formulas for the number of occurrences of n as a part of a Pythagorean triple, and also as a part of a primitive Pythagorean triple. We also determine the least positive integer that is a part of at least n such primitive triples and obtain several conditions that help in characterizing the analogous case for all triples.