A method of finding an integral solution to x3 + y3 = kz4

ABSTRACT

In this article, we proved that an integral solution (a, b, c) to the equation x3+y3ز=kz4 is of the form aز=s, bز=t for any two integers s, t and cز=(r3u/d3)1/4 for some u with (k,r)ز=d where k divides a3 + b3 and r is a common factor of a and b.

Keyword: Integral solution