



On ternary quadratic equation $6(x^2 + y^2) - 11xy = 23z^2$

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ABSTRACT

The ternary homogeneous quadratic equation given by $6(x^2 + y^2) - 11xy = 23z^2$ representing a cone is analyzed for finding its non-zero distinct integral solutions. A few interesting relations and special polygonal and pyramidal numbers are presented.

Keywords: Ternary quadratic, integer solutions, homogeneous polygonal number, pyramidal number.