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OBSERVATIONS ON THE HOMOGENOURS TERNARY QUADRATIC DIOPHANTINE EQUATION $39(X^2+y^2)$ $-72xy=246z^2$

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ABSTRACT

The homogeneous ternary quadratic equation given by $39(x^2 + y^2) - 72xy = 246z^2$ is analysed for its non-zero distinct integer solutions through different methods. Also, formulae for generating sequence of integer solutions based on the given solution are presented.

KEYWORDS: Ternary Quadratic, Homogeneous Quadratic, Integer Solutions

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