ON TRANSCENDENTAL EQUATION
$$\sqrt{2z-4} = \sqrt{x+\sqrt{A}y} + \sqrt{x-\sqrt{A}y}$$

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Abstract

We obtain non-trivial integral solutions for the typical surd equation $\sqrt{2z-4} = \sqrt{x+\sqrt{A}y} + \sqrt{x-\sqrt{A}y}$, when $A = 5$ and $A = 6$. A few interesting relations among the solutions are presented. Also the recurrence relations satisfied by the solutions are given.

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Key Words : *Nasty numbers, Integral solutions.*