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A study of the symmetry analysis for the Hirota-Satsuma equations

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Abstract

In this work, we present explicit Painleve test for Hirota-Satsuma equation. The invariance and integrability properties of Hirota-Satsuma equation are investigate. Furthermore, using Runge-Kutta-Merson in shooting and matching technique to solve the nonlinear ordinary differential equations which were converted from similarity reduction numerically. © 2009.

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