2006 Vol. 45 No. 5 pp. 769-776 DOI:

New Exact Solutions for Konopelchenko-Dubrovsky Equation Using an Extended Riccati Equation Rational Expansion Method

SONG Li-Na and ZHANG Hong-Qing

Department of Applied Mathematics, Dalian University of Technology, Dalian 116024, China (Received: 2005-8-11; Revised:)

Abstract: Taking the Konopelchenko-Dubrovsky system as a simple example, some families of rational formal hyperbolic function solutions, rational formal triangular periodic solutions, and rational solutions are constructed by using the extended Riccati equation rational expansion method presented by us. The method can also be applied to solve more nonlinear partial differential equation or equations.

PACS: 02.30.Jr, 05.45.Yv

Key words: Konopelchenko-Dubrovsky equation, extended Riccati equation rational expansion method, nonlinear partial differential equation or equations

[Full text: PDF]

Close