

New Approach to Find Exact Solutions to Classical Boussinesq System

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Abstract: In this paper, based on a new system of three Riccati equations, we give a new method to construct more new exact solutions of nonlinear differential equations in mathematical physics. The classical Boussinesq system is chosen to illustrate our method. As a consequence, more families of new exact solutions are obtained, which include solitary wave solutions and periodic solutions.

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Key words: classical Boussinesq system, solitary solution, periodic solution

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