New Method for Finding a Series of Exact Solutions to Generalized Breaking Soliton Equation

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Abstract: In this paper, a new generalized extended tanh-function method is presented for constructing soliton-like, period-form solutions of nonlinear evolution equations (NEEs). This method is more powerful than the extended tanh-function method [Phys. Lett. A 277 (2000) 212] and the modified extended tanh-function method [Phys. Lett. A 285 (2001) 355]. Abundant new families of the exact solutions of Bogoyavlenskii's generalized breaking soliton equation are obtained by using this method and symbolic computation system Maple.

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