Abstract

Extended Jacobian elliptic function expansion method is employed to find the exact traveling wave solutions involving parameters for nonlinear evolution equations. When these parameters are taken to be special values, the solitary wave solutions are derived from the exact traveling wave solutions. It is shown that extended Jacobian elliptic function expansion method provides an effective and a more powerful mathematical tool for solving nonlinear evolution equations in mathematical physics. Comparison between our results and the well-known results will be presented.

References

Extended Jacobian Elliptic Function Expansion Method and its Applications for Solving some Nonlinear Evolution Equations in Mathematical Physics

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Extended Jacobian Elliptic Function Expansion Method and its Applications for Solving some Nonlinear Evolution Equations in Mathematical Physics


Index Terms

Computer Science

Applied Mathematics
Keywords
Extended Jacobian elliptic function expansion method; (2+1)-Dimensional soliton breaking equation; (3+1)-Dimensional Kadomstev-Petviashvili; Travelling wave solutions; Solitary wave solutions.