Abstract

In this paper, we employ the modified simple equation method to find the exact traveling wave solutions involving parameters of nonlinear evolution equations via the (1+1)-dimensional generalized shallow water-wave equation and the (2+1)-dimensional KdV-Burgers equation. 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 the proposed method provides a more powerful mathematical tool for constructing exact traveling wave solutions for many other nonlinear evolution equations.

References

- Bekir A., Application of the (G'/G)–expansion method for nonlinear evolution
Modified Simple Equation Method and its Applications for some Nonlinear Evolution Equations in Mathematical Physics


Index Terms

Computer Science

Applied Mathematics
Keywords
Modified simple equation method  Nonlinear evolution equations  Exact traveling wave solutions
Solitary wave solutions