

# New Solitary Wave Solution for the Boussinesq Wave Equation Using the Semi-Inverse Method and the Exp-Function Method

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Using the semi-inverse method, a variational formulation is established for the Boussinesq wave equation. Based on the obtained variational principle, solitary solutions in the sech-function and exp-function forms are obtained.

*Key words:* Boussinesq Wave Equation; Solitary Wave Solution; Semi-Inverse Method; Exp-Function Method.