

## New Travelling Wave Solutions to Compound KdV-Burgers Equation

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**Abstract:** The compound KdV-Burgers equation and combined KdV-mKdV equation are real physical models concerning many branches in physics. In this paper, applying the improved trigonometric function method to these equations, rich explicit and exact travelling wave solutions, which contain solitary-wave solutions, periodic solutions, and combined formal solitary-wave solutions, are obtained.

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**Key words:** compound KdV-Burgers equation, combined KdV-mKdV equation, travelling wave solution

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