

New Solitary Wave Solutions in Higher-Order Wave Equations of the Korteweg – de Vries Type

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In this work we study two partial differential equations that constitute second- and third-order approximations of water wave equations of the Korteweg – de Vries type. In particular, we first study previous results concerning the derivation of solitary wave solutions of the second-order approximation. We then use a simple assumption and find new solitary wave solutions for both equations.

Key words: Solitary Wave Solutions.