

Finite Difference Solution for Vibrating Membrane

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Abstract

The Galerkin method was employed in the solution of the rectangular membrane vibration problem by Young [1]. In both three-term and six-term solutions, the curve veering phenomena did take place. As the results show, the more terms are used, the narrower the gap becomes between two veering curves. As a matter of fact, the veering curves will touch with each other if finite terms are applied. In this paper, the same problem will be approached by the finite difference method to determine whether veering also occurs with this approximate approach.

Keyword : curve veering, finite difference method