Abstract

Three numerical methods were implemented for solving the eight-order boundary value problems. These methods are Differential transformation method, Homotopy perturbation method, and Rung-Kutta of 4th Order method. Two physical problems from the literature were solved by these methods for comparing results. Solutions were presented in Tables and figures. The differential transformation method shows an effective numerical solution to linear boundary value problems. This considers an important contribution in solving boundary value problems by the differential transformation method.