

Title of Article: A Semi-analytical Method for Solutions of a Certain Class of Ordinary Differential Equations

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Abstract: *This paper presents the theory and applications of a new computational technique referred to as Differential Transform Method (DTM) for solving linear second order ordinary differential equations, for both homogeneous and nonhomogeneous cases. For the robustness and efficiency of the method, four examples are considered. The results indicate that the DTM is reliable and accurate when compared to the exact solutions of the solved problems.*