

Title of Article: Three Step Hybrid Method for the Solution of General Second Order Ordinary Differential Equations

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Abstract: Block method is adopted in this paper for the direct solution of second order ordinary differential equations. The method is derived by collocation and interpolation of power series approximate solution to give a continuous hybrid linear multistep method which is implemented in block method to derive the independent solution at selected grid points. The properties of the derived scheme were investigated and found to be zero-stable, consistent and convergent. The efficiency of the derived method was tested and found to compare favourably with the existing methods.