

Review of: "New Computational Methods Using Seventh Derivative Type for the Solution of First Order Initial Value Problems"

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Potential competing interests: No potential competing interests to declare.

For the paper "New computational methods using seventh derivative type for the solution of first order initial value problems," there are several areas that require major revisions to enhance the quality and impact of the research:

- The introduction should provide a clearer overview of the significance of stiff differential equations and the need for robust numerical methods.
- The paper lacks a clear and concise problem statement, making it challenging for readers to grasp the main research question.
- The organization of the paper could be improved by restructuring sections to enhance the logical flow of information.
- The methodology section needs more detailed explanations of the interpolation and collocation techniques used to derive the implicit block methods of a seventh derivative type.
- The process of obtaining the seventh derivative functions and their implementation using Newton Raphson's method should be elaborated for better understanding.
- The results section should include a more comprehensive analysis of the efficiency and accuracy of the developed formulae on different classes of first-order initial value problems.
- Clear comparisons with existing methods should be provided to demonstrate the superiority of the proposed methods.
- The discussion section should delve deeper into the implications of the findings and how they contribute to advancing knowledge in the field of numerical methods for solving differential equations.
- The conclusion should be strengthened by summarizing the key findings and their significance in a more impactful manner.

By addressing these major revision points, the paper can significantly enhance its quality, clarity, and impact within the field of numerical methods for solving differential equations.

