This text introduces students to mathematical/computational methods in chemical kinetics, thermodynamics, quantum chemistry.

- **Front Matter**

- **1: Before We Begin...**

- **2: Complex Numbers**

- **3: Series**

- **4: First Order Ordinary Differential Equations**
5: Second Order Ordinary Differential Equations

6: Power Series Solutions of Differential Equations

7: Fourier Series

8: Calculus in More than One Variable
9: Exact and Inexact Differentials

10: Plane Polar and Spherical Coordinates

11: Operators

\[
\frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} \\
\frac{\partial^2 v}{\partial x^2} + \frac{\partial^2 v}{\partial y^2}
\]

12: Partial Differential Equations
13: Determinants

14: Vectors

15: Matrices

16: Formula Sheets

Back Matter

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