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Autore	O'Neil Peter V.
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6.3 Applications of Bessel Functions 6.4 Legendre Polynomials and Applications; Chapter 7: Integral Transform Methods of Solution; 7.1 The Fourier Transform; 7.2 Heat and Wave Equations; 7.3 The Telegraph Equation; 7.4 The Laplace Transform; Chapter 8: First-Order Equations; 8.1 Linear First-Order Equations; 8.2 The Significance of Characteristics; 8.3 The Quasi-Linear Equation; Series List; End User License Agreement

Sommario/riassunto

As the Solutions Manual, this book is meant to accompany the main title, Beginning of Partial Differential Equations, Third Edition. The Third Edition features a challenging, yet accessible, introduction to partial differential equations, and provides a solid introduction to partial differential equations, particularly methods of solution based on characteristics, separation of variables, as well as Fourier series, integrals, and transforms. Thoroughly updated with novel applications such as Poe's pendulum and Kepler's problem in astronomy, the book begins with first-order linear and quasi-li
