



METADATA

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Abstract

This book serves the basic techniques in asymptotic analysis and is divided in two parts. The first part deals with the asymptotic behavior of integrals. We present the Laplace method for integrals, and Watson's lemma. We continue with the method of steepest descents and

the method of stationary phase. Emphasis has been given on some special functions, e.g., Gamma, Airy, Bessel. The second part studies the asymptotic behaviors of sums. The main tools are summation by parts, Euler Maclaurin summation formula, and Laplace method for sums

