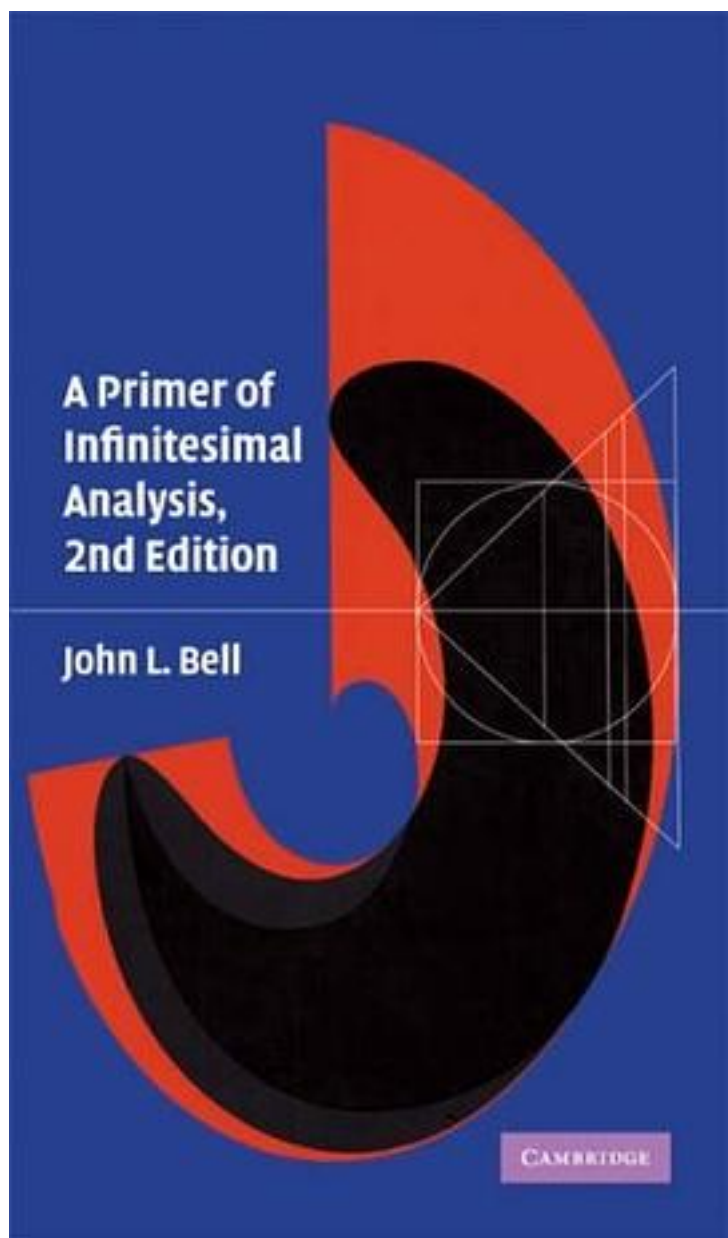


# A Primer of Infinitesimal Analysis



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One of the most remarkable recent occurrences in mathematics is the refounding, on a rigorous basis, of the idea of infinitesimal quantity, a notion which played an important role in the early development of the calculus and mathematical analysis. In this new edition basic calculus, together with some of its applications to simple physical problems, are presented through the use of a straightforward, rigorous, axiomatically formulated concept of 'zero-square', or 'nilpotent' infinitesimal - that is, a quantity so small that its square and all higher powers can be set, literally, to zero. The systematic employment of these infinitesimals reduces the differential calculus to simple algebra and, at the same time, restores to use the "infinitesimal" methods figuring in traditional applications of the calculus to physical problems - a number of which are discussed in this book. This edition also contains an expanded historical and philosophical introduction.

作者介绍:

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