

**ZMATH 2014b.00655**

**Kuttler, Kenneth**

**Calculus. Theory and applications. Vol. 1.**

Hackensack, NJ: World Scientific (ISBN 978-981-4324-26-7/hbk; 978-981-4329-69-9/pbk; 978-981-4335-71-3/hbk-set; 978-981-4335-72-0/pbk-set). xii, 486 p. (2011).

Publisher's description: This is a book on single variable calculus including most of the important applications of calculus. It also includes proofs of all theorems presented, either in the text itself, or in an appendix. It also contains an introduction to vectors and vector products which is developed further in Volume 2. While the book does include all the proofs of the theorems, many of the applications are presented more simply and less formally than is often the case in similar titles. Supplementary materials are available upon request for all instructors who adopt this book as a course text. Contents: – A short review of precalculus – Functions – Derivatives – Some important special functions – Properties of derivatives – Applications of derivatives – Antiderivatives – Applications of antiderivatives – Other differential equations – The integral – Infinite series – Fundamentals – Vector products – Some curvilinear coordinate systems

*Classification:* I15