

Bruckner, Andrew M.**Differentiation of real functions.** (English) [Zbl 0796.26004](#)

CRM Monograph Series. 5. Providence, RI: American Mathematical Society (AMS). xi, 195 p. (1994).

“Since the appearance of the first edition of this book in 1978 (cf. [Zbl 0382.26002](#)) substantial advances have been achieved in a number of areas related to the differentiation of real functions. It seemed appropriate to add a chapter to summarize some of these advances. We have attempted to supply such a summary in Chapter 15. We limit this summary to new work that extends, or is otherwise closely connected to, the material that appeared in the original edition. Even here, we cite only a fraction of the many relevant new works.

Where convenient, we provide an outline of a new development, state new theorems in detail and provide examples and proofs. But often the required technical machinery to do this is prohibitive for our purpose. In such cases, we limit ourselves to indications of developments or results.

The original fourteen chapters remain essentially unchanged. We corrected typographical errors, and made other minor changes...”

MSC:

- [26-02](#) Research exposition (monographs, survey articles) pertaining to real functions
- [26A24](#) Differentiation (real functions of one variable): general theory, generalized derivatives, mean value theorems
- [26A21](#) Classification of real functions; Baire classification of sets and functions
- [26A27](#) Nondifferentiability (nondifferentiable functions, points of nondifferentiability), discontinuous derivatives
- [26A48](#) Monotonic functions, generalizations

Cited in **1** Review
Cited in **34** Documents

Keywords:[differentiation](#); [real functions](#)