Cambridge Elements

Elements in the Philosophy of Mathematics
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A CONCISE HISTORY OF MATHEMATICS FOR PHILOSOPHERS

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CAMBRIDGE UNIVERSITY PRESS

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University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
New Delhi – 110025, India

79 Anson Road, #06–04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org
Information on this title: www.cambridge.org/9781108456234
DOI: 10.1017/9781108610124

First published 2019

A catalogue record for this publication is available from the British Library.

ISBN 978-1-108-45623-4 Paperback
ISSN 2399-2883 (online)
ISSN 2514-3808 (print)

A Concise History of Mathematics for Philosophers

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First published online: June 2019

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Abstract: This Element aims to present an outline of mathematics and its history, with particular emphasis on events that shook up its philosophy. It ranges from the discovery of irrational numbers in ancient Greece to the nineteenth- and twentieth-century discoveries on the nature of infinity and proof. Recurring themes are intuition and logic, meaning and existence, and the discrete and the continuous. These themes have evolved under the influence of new mathematical discoveries, and the story of their evolution is, to a large extent, the story of philosophy of mathematics.

Keywords: mathematics, philosophy

ISBNs: 9781108456234 (PB), 9781108610124 (OC)
ISSNs: 2399-2883 (online), 2514-3808 (print)

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