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Nota di contenuto	Cover; Contents; Preface; Acknowledgements; Terminological Conventions; Introduction; Platonism in the Philosophy of Mathematics; Nominalism in the Philosophy of Mathematics; The Indispensability Argument; 1 The Origins; 1.1 Plato as a Platonist?; 1.2 Aristotle Between Platonism and Anti-platonism; 1.3 Proclus: The Neoplatonic Interpretation of Euclid's Geometry; 1.4 Kant: The Transcendental Interpretation of Classical Arithmetic and Geometry; 2 From Frege to Godel (Through Hilbert); 2.1 Frege's Logicist Platonism; 2.2 Russell and the Separation of Logicism and Platonism; 2.3 Set Theory 2.4 The Problem of Foundations2.5 Godel's Platonism and the Rise of Mathematical Intuition; 3 Benacerraf's Arguments; 3.1 What Natural Numbers Could Not Be (According to Benacerraf); 3.2 Benacerraf's Dilemma; 3.3 A Map of Responses to Benacerraf's Dilemma:

Contemporary Solutions to Plato's Problem; 4 Non-conservative Responses to Benacerraf's Dilemma; 4.1 Field's Nominalism: Mathematics Without Truth and Science Without Numbers; 4.2 Mathematics as Fiction: Field and Yablo; 4.3 Eliminative Structuralism and its Modal Version; 4.4 Maddy and the Cognitive Origins of Set Theory

5 Conservative Responses to Benacerraf's Dilemma 5.1 Neo-logicism: A Revised Version of Frege's Programme; 5.2 Linsky, Zalta and 'Object Theory': Mathematics and Logic (or Metaphysics) of Abstract Objects; 5.3 A First Version of Non-eliminative Structuralism: Ante Rem Structuralism; 5.4 A Second Version of Non-eliminative Structuralism: Parsons and the Role of Intuition; 6 The Indispensability Argument: Structure and Basic Notions; 6.1 Four Versions of IA; 6.2 The Quine-Putnam Argument and Colyvan's Argument; 6.3 (In)dispensability; 6.4 Quine's Criterion of Ontological Commitment 6.5 Naturalism 6.6 Confirmational Holism; 6.7 The Dispensability of Naturalism and Confirmational Holism; 7 The Indispensability Argument: The Debate; 7.1 Against Indispensability; 7.2 Against Ontological Commitment; 7.3 Against Naturalism and Scientific Realism; 7.4 Against Confirmational Holism; Concluding Remarks; Notes; References; Index

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Sommario/riassunto

What is mathematics about? And how can we have access to the reality it is supposed to describe? The book tells the story of this problem, first raised by Plato, through the views of Aristotle, Proclus, Kant, Frege, Gödel, Benacerraf, up to the most recent debate on mathematical platonism.

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