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Nota di contenuto	Cover; Preface; Contents; 1 The System of Numbers: An Overview; 1.1 From natural to real numbers; 1.2 Imaginary numbers; 1.3 Polynomials and transcendental numbers; 1.4 Cardinals and ordinals; 2 Writing Numbers-Now and Back Then; 2.1 Writing numbers nowadays: positional and decimal; 2.2 Writing numbers back then: Egypt, Babylon and Greece; 3 Numbers and Magnitudes in the Greek Mathematical Tradition; 3.1 Pythagorean numbers; 3.2 Ratios and proportions; 3.3 Incommensurability; 3.4 Eudoxus' theory of proportions; 3.5 Greek fractional numbers; 3.6 Comparisons, not measurements; 3.7 A unit length 6.1 Fibonacci and Hindu-Arabic numbers in Europe6.2 Abacus and coss traditions in Europe; 6.3 Cardano's Great Art of Algebra; 6.4 Bombelli and the roots of negative numbers; 6.5 Euclid's Elements in the Renaissance; Appendix 6.1 Casting out nines; 7 Number and Equations at the Beginning of the Scientific Revolution; 7.1 Viete and the new art of analysis; 7.2 Stevin and decimal fractions; 7.3 Logarithms and the decimal system of numeration; Appendix 7.1 Napier's construction of logarithmic tables; 8 Number and Equations in the Works of Descartes, Newton and their Contemporaries

8.1 Descartes' new approach to numbers and equations; 8.2 Wallis and the primacy of algebra; 8.3 Barrow and the opposition to the primacy of algebra; 8.4 Newton's Universal Arithmetick; Appendix 8.1 The quadratic equation. Descartes' geometric solution; Appendix 8.2 Between geometry and algebra in the seventeenth century: The case of Euclid's Elements; 9 New Definitions of Complex Numbers in the Early Nineteenth Century; 9.1 Numbers and ratios: giving up metaphysics; 9.2 Euler, Gauss and the ubiquity of complex numbers; 9.3 Geometric interpretations of the complex numbers; 9.4 Hamilton's formal definition of complex numbers

Sommario/riassunto

The world around us is saturated with numbers. They are a fundamental pillar of our modern society, and accepted and used with hardly a second thought. But how did this state of affairs come to be? In this book, Leo Corry tells the story behind the idea of number from the early days of the Pythagoreans, up until the turn of the twentieth century. He presents an overview of how numbers were handled and conceived in classical Greek mathematics, in the mathematics of Islam, in European mathematics of the middle ages and the Renaissance, during the scientific revolution, all the way through to the
