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Autore	Conway John H.
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Sommario/riassunto	"This book investigates the geometry of quaternion and octonion algebras. Following a comprehensive historical introduction, the book illuminates the special properties of 3- and 4-dimensional Euclidean spaces using quaternions, leading to enumerations of the corresponding finite groups of symmetries. The second half of the book discusses the less familiar octonion algebra, concentrating on its remarkable "triality symmetry" after an appropriate study of Moufang loops. The authors also describe the arithmetics of the quaternions and octonions. The book concludes with a new theory of octonion factorization. Topics covered include the geometry of complex numbers, quaternions and 3-dimensional groups, quaternions and 4-dimensional groups, Hurwitz integral quaternions, composition algebras, Moufang loops, octonions and 8-dimensional geometry, integral octonions, and the octonion projective plane."--Provided by publisher.