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| Autore                  | Ball W. W. Rouse (Walter William Rouse), <1850-1925.>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| Descrizione fisica      | 1 online resource (449 pages)<br>1 online resource                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Altri autori (Persone)  | CoxeterH. S. M <1907-2003.> (Harold Scott Macdonald)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| Soggetti                | Mathematical recreations - Famous problems<br>Geometry<br>Cryptography<br>Ciphers<br>Mathematics<br>Physical Sciences & Mathematics<br>Elementary Mathematics & Arithmetic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Nota di contenuto       | Cover -- Contents -- Preface to the Tenth Edition -- Preface to the Eleventh Edition -- Preface to the Twelfth Edition -- I: ARITHMETICAL RECREATIONS -- To find a number selected by someone -- Prediction of the result of certain operations -- Problems involving two numbers -- Problems depending on the scale of notation -- Other problems with numbers in the denary scale -- Four fours problem -- Problems with a series of numbered things -- Arithmetical restorations -- Calendar problems -- Medieval problems in arithmetic -- The Josephus problem. Decimation -- Nim and similar games -- Moore's game -- Kayles -- Wythoff's game -- Addendum on solutions -- II: ARITHMETICAL RECREATIONS (continued) -- Arithmetical fallacies -- Paradoxical problems -- Probability problems -- Permutation problems -- Bachet's weights problem -- The decimal expression for $1/n$ -- Decimals and continued fractions -- Rational right-angled triangles -- Triangular and pyramidal numbers -- Divisibility -- The prime number theorem -- Mersenne numbers -- Perfect numbers -- Fermat numbers -- Fermat's Last Theorem -- Galois fields -- III: GEOMETRICAL |

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of -- Results of Egyptians, Babylonians, Jews -- Results of Archimedes and other Greek writers -- Results of European writers, 1200-1630 -- Theorems of Wallis and Brouncker -- Results of European writers, 1699-1873 -- Approximations by the theory of probability -- XIII: CALCULATING PRODIGIES -- John Wallis, 1616-1703 -- Buxton, circ. 1707-1772 -- Fuller, 1710-1790 -- Ampère -- Gauss, Whately -- Colburn, 1804-1840 -- Bidder, 1806-1878 -- Mondeux, Mangiamele -- Dase, 1824-1861 -- Safford, 1836-1901 -- Zamebone, Diamandi, Rückle -- Inaudi, 1867- -- Types of memory of numbers -- Bidder's analysis of methods used -- Multiplication -- Digital method for division and factors -- Square roots. Higher roots -- Compound interest. Logarithms -- Alexander Craig Aitken -- XIV: CRYPTOGRAPHY AND CRYPTANALYSIS -- Cryptographic systems -- Transposition systems -- Columnar transposition -- Digraphs and trigraphs -- Comparison of several messages -- The grille -- Substitution systems -- Tables of frequency -- Polyalphabetic systems -- The Vigenere square -- The Playfair cipher -- Code -- Determination of cryptographic system -- A few final remarks -- Addendum: References for further study -- INDEX -- A -- B -- C -- D -- E -- F -- G -- H -- I -- J -- K -- L -- M -- N -- O -- P -- Q -- R -- S -- T -- U -- V -- W -- Y -- Z.

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### Sommario/riassunto

For over eighty years this delightful classic has provided entertainment through mathematical problems commonly known as recreations. This new edition upholds the original, but the terminology and treatment of problems have been updated and much new material has been added.

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