Théorie des nombres

W.T. TUTTE. — **Graph theory.** — Encyclopedia of mathematics and its applications. — Cambridge mathematical library. — Un vol. broché, 15,5×23,5, de XXI, 333 p. — ISBN 0-521-79489-7. — Prix: £19.95. — Cambridge University Press, Cambridge, 2001.

Designed for the non-specialist, this book is an invaluable reference tool for those interested in a basic understanding of the subject. Exercises, notes and exhaustive references follow each chapter, making it outstanding as both as text and reference. The author approaches the subject with a lively writing style. The reader will delight to discover that the topics in this book are coherently unified and include some of the deepest and most beautiful developments in graph theory.

Théorie des nombres

Harold DAVENPORT. — **Multiplicative number theory.** — 3rd edition. — Graduate texts in mathematics, vol. 74. — Un vol. relié, 16×24, de XIII, 177 p. — ISBN 0-387-95097-4. — Prix: DM 99.00. — Springer, New York, 2000.

This book thoroughly examines the distribution of prime numbers in arithmetic progressions. It covers many classical results, including Dirichlet's theorem on the existence of prime numbers in arithmetic progressions, the theorem of Siegel, and functional equations of the L-functions and their consequences for the distribution of prime numbers. In addition, a simplified, improved version of the large sieve method is presented. The third edition includes a large number of revisions and corrections as well as a new section with references to more recent work in the field.

Matti JUTILA and Tauno METSÄNKYLÄ, (Editors). — **Number theory: proceedings of the Turku Symposium on Number Theory in Memory of Kustaa Inkeri, May 31-June 4, 1999.** — Un vol. relié, 17,5×24,5, de VIII, 328 p. — ISBN 3-11-016481-7. — Prix: DM 268.00. — Walter de Gruyter, Berlin, 2001.

These proceedings contain 22 refereed research and surveys articles. The subject of the symposium was number theory in a broad sense with an emphasis on recent advances and modern methods. The topics covered in this volume include various questions in elementary number theory, new developments in classical Diophantine problems — in particular of the Fermat and Catalan type, the ABC-conjecture, arithmetic algebraic geometry, elliptic curves, Diophantine approximations, Abelian fields, exponential sums, sieve methods, box splines, the Riemann zeta-function and other Dirichlet series, and the spectral theory of automorphic functions with its arithmetical applications.

H.P.F. SWINNERTON-DYER. — **A brief guide to algebraic number theory.** — London Mathematical Society student texts, vol. 50. — Un vol. broché, 15,5×23, de IX, 146 p. — ISBN 0-521-00423-3. — Prix: £15.95. — Cambridge University Press, Cambridge, 2001.

This is an account of algebraic number theory, a field which has grown to touch many other areas of pure mathematics. It is written primarily for beginning graduate students in pure mathematics, and encompasses everything that most such students are likely to need; others who need the material will also find it accessible. The book covers the two basic methods of approaching algebraic number theory, using ideals and valuations, and includes material on the most usual kinds of algebraic number field, the functional equation of the zeta function and a substantial digression on the classical approach to Fermat's Last Theorem, as well as a comprehensive account of class field theory. Many exercises and an annotated reading list are also included.