

may lead to a complete solution of Bannai's problem to determine all \mathcal{C} -polynomial DRGs of diameter > 2 .

There is no doubt that the book under review will be an essential tool for the specialists in discrete mathematics. But also the general mathematician may take advantage of the ideas expressed in the book. To illustrate this we recall that in the very first line of this review we spoke of regularity, and not of symmetry of the platonic solids. Indeed, the book is devoted to graphs having well-defined regularity properties. In the group case regularity actually can be interpreted as symmetry. This is important for two reasons. Group theory provides many examples of nice graphs; and algebraic graph theory sometimes provides interesting results about groups.

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BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 24, Number 2, April 1991
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0273-0979/91 \$1.00 + \$.25 per page

The Markoff and Lagrange spectra, by Thomas W. Cusick and Mary E. Flahive. Math. Surveys and Monographs, no. 30, Amer. Math. Soc., Providence, RI, 1989, ix + 97 pp., \$42.00. ISBN 0-8218-1531-8

Diophantine approximation begins with the following theorem of Dirichlet: Let α be a real number and $Q \geq 1$ an integer, then there exist integers p and q such that $1 \leq q \leq Q$ and $|\alpha q - p| \leq (Q + 1)^{-1}$. From this basic result there springs a large number of generalizations, extensions and variations. Suppose, for example, that $\|x\|$ denotes the distance from the real number x to the nearest integer. If α is irrational, then it follows immediately that there are infinitely many positive integers q which satisfy

$$(1) \quad q\|\alpha q\| < 1.$$

Naturally one may ask if the bound in (1) can be sharpened and it is a result of Hurwitz [5] (and implicit in an earlier paper of Markoff [8]) that it can be. In fact if α is irrational, there are infinitely many positive integers q such that

$$(2) \quad q\|\alpha q\| < 5^{-1/2}$$