

# Glasgow Mathematical Journal

## CONTENTS

<b>Anthony F. Ruston</b> , A direct proof of a theorem of West on sequences of Riesz operators	93
<b>D. Homentcovschi</b> , On an integral equation	95
<b>Michael J. Ganley</b> , Difference sets and planar polarities	99
<b>Thomas L. Pirnot</b> , Certain congruences on a completely regular semigroup	109
<b>R. J. Evans</b> , Free products of two real cyclic matrix groups	121
<b>R. W. K. Odoni</b> , Multiplicative forms and nonassociative algebras	129
<b>L. W. Beineke and R. E. Pippert</b> , On the enumeration of planar trees of hexagons	131
<b>J. M. O. Mitchell</b> , Counting word-trees	148
<b>Fred Piper</b> , On relative difference sets and projective planes	150
<b>I. N. Sneddon</b> , Transform solutions of Dirichlet problems in quarter-spaces	155
<b>Johnny A. Johnson</b> , A note on regular local Noether lattices	159
<b>I. Anderson and R. J. Cook</b> , Bi-embeddings of graphs	162
<b>J. H. Webb</b> , Extended Schauder decompositions of locally convex spaces	166
<b>M. J. Crabb, J. Duncan and C. M. McGregor</b> , Characterizations of commutativity for $C^*$ -algebras	172
<b>Jonathan S. Golan</b> , Matching torsion and cotorsion theories	176
<b>R. L. McFarland</b> , On $(v, k, \lambda)$ -configurations with $v=4p^e$	180
<b>Robert P. Feinerman and Robert B. Kelman</b> , Corrigenda	184

SCOTTISH ACADEMIC PRESS LIMITED  
25 PERTH STREET  
EDINBURGH EH3 5DW

## GLASGOW MATHEMATICAL JOURNAL

The *Glasgow Mathematical Journal* is a continuation of the *Proceedings of the Glasgow Mathematical Association*, founded in 1952 by the late Professor T. M. MacRobert. It is published with the support of the University Court of the University of Glasgow. The *Glasgow Mathematical Journal* is published in Parts twice yearly, in January and July; two Parts complete a Volume of approximately 200 pages.

The prepaid subscription for each Volume is £3.00 in U.K., \$8.50 in U.S.A., post free. Single parts may be supplied at a cost of £1.55 in U.K., \$4.50 in U.S.A., net.

Copies may be ordered direct from the publishers or from any bookseller.

### *Information for Contributors*

While the *Glasgow Mathematical Journal* is intended primarily for Pure Mathematics, papers on Applied Mathematics will also be accepted. Manuscripts from all parts of the world will be welcomed and given careful consideration.

Manuscripts, preferably typed, should be prepared so as to conform with the practice in current numbers of the *Journal*, especially with regard to line illustrations, references, tables and summaries. The name of the author and the date of the receipt of the manuscript will be printed under the title. Text figures must be suitable for line block reproduction, lettered in pencil, numbered, and separated from the text but allocated clearly to sections of the text.

References should be placed at the end of the paper, arranged and numbered in alphabetical order. In the text, reference numbers should be enclosed in square brackets and underlined, to distinguish them from formula numbers, which should be quoted in round brackets. The following particulars should be given, in the order indicated:

for references to books—*author, title, edition, place of publication, year of publication, page reference*;

for references to articles in periodicals—*author, title of article, short title of periodical, series no. (if any), volume no., year, pagination*.

A proof is supplied once in galley form, together with an Order Form for offprints. Offprints are supplied free to the number of twenty-five; additional copies, if ordered prior to publication, will be supplied, at cost, at the request of the contributor. Excessive corrections may be charged to the author.

Manuscripts should be sent to:

THE EDITORS

GLASGOW MATHEMATICAL JOURNAL

DEPARTMENT OF MATHEMATICS

UNIVERSITY OF GLASGOW, GLASGOW G12 8QW