# THE JOURNAL of THE AUSTRALIAN MATHEMATICAL SOCIETY

### **VOLUME XIV - PART 4**

### DECEMBER 1972

E. R. LOVE	Two index laws for fractional integrals and derivatives	385	
WILLIAM JACO	Geometric realizations for free quotients		
R. TANGEMAN and D. KREILING	Lower radicals in nonassociative rings	419	
P. G. LAIRD	Some properties of mean periodic functions	424	
J. H. BLACKWELL	Transient heat flow from a thin circular disk — small- time solution	433	
THOMAS G. NEWMAN	The descending chain condition in modular lattices .	443	
S. FAJTLOWICZ	On fundamental operations in groups	445	
M. WESTCOTT	The probability generating functional	448	
KIM-PEU CHEW	N-Compact spaces as limits of inverse systems of dis-		
	crete spaces	467	
H. P. DIKSHIT	Absolute summability of a Fourier series and its derived		
	series by a product method	470	
D. LOVELOCK	The Euler-Lagrange expression and degenerate		
	Lagrange densities	482	
R. E. PHILLIPS	Some generalizations of normal series in infinite groups	496	
PRAN NATH CHICHRA and RAM SINGH	Convex sum of univalent functions	503	
A. O. KONNULLY	Perspective simplexes and Tucker quadrics	508	
	Index to Volume XIV - 1972	511	

Published for THE AUSTRALIAN MATHEMATICAL SOCIETY

by Jerusalem Academic Press — Jerusalem — Israel

https://doi.org/10.1017/S1446788700011009 Published online by Cambridge University Press

#### THE AUSTRALIAN MATHEMATICAL SOCIETY

President:	G. SZEKERES	University of New South Wales
Secretary:	W. Pyr	Melbourne College of Education, Cnr. Grattan and Swanston Streets, Carlton, Victoria 3053.
Treasurer:	V. G. HART	Example 2 Constraints of Mathematics, University of Queensland, St. Lucia, Queensland, 4067
Business Manager:	H. M. FINUCAN	St. Lucia, Queensland, 4067
Membership subscriptions:	Institutions: Other members:	A\$100 A\$16 (which may be reduced to A\$6 for undergraduates and junior graduates)

*Reciprocity agreements:* Such agreements have been made with a number of other mathematical societies. Under the agreements members of the other societies who are not normally resident in Australia may join the Australian Mathematical Society at half the current rates.

Membership and correspondence: Applications for membership, notice of change of address or title or position, and other correspondence, except as noted below, should be sent to the Secretary. Subscriptions and correspondence related to accounts should be sent to the Treasurer. Correspondence about the distribution of the Society's JOURNAL and BULLETIN, and orders for back numbers, should be sent to the Business Manager.

Members of the Society receive copies of the JOURNAL free, and may subscribe to the BULLETIN at the price of A\$4 per volume. Members may elect to receive the BULLETIN instead of the JOURNAL.

#### THE BULLETIN

Two volumes of three numbers each are published annually, at an annual subscription of A\$25, in 1972.

Manuscripts for publication in the BULLETIN should be sent to the Editor:

Professor B. H. NEUMANN, Department of Mathematics, Institute of Advanced Studies, Australian National University, POB 4, Canberra A.C.T. 2600

or to the Associate Editor, Dr. L. G. KOVACS, at the same address.

# THE JOURNAL of THE AUSTRALIAN MATHEMATICAL SOCIETY

VOLUME XIV 1972

Printed and published for THE AUSTRALIAN MATHEMATICAL SOCIETY