

PROCEEDINGS
OF THE
EDINBURGH
MATHEMATICAL SOCIETY

VOL. XXXVIII. (SESSION 1919-20)

Reprinted with permission of
Edinburgh Mathematical Society
by
KRAUS REPRINT LTD
Vaduz
1964

PROCEEDINGS
OF THE
EDINBURGH
MATHEMATICAL SOCIETY

VOL. XXXVIII. (SESSION 1919-20)

Reprinted with permission of
Edinburgh Mathematical Society
by
KRAUS REPRINT LTD
Vaduz
1964

NOTE.

The Society desires to acknowledge with hearty thanks the generous assistance of the Carnegie Trustees, who have defrayed the cost of printing the following papers:—

- | | | |
|--|---|---------------------|
| The Modified Bessel Function $K_n(z)$ | } | Dr T. M. MACROBERT. |
| Extension of Frenet's Formulae to a Curve
in Flat Space of n Dimensions . . . } | } | Dr R. F. MUIRHEAD. |
| A Version of Hagen's Proof of the "Law
of Error" } | } | Dr R. F. MUIRHEAD. |
| Note on the Polynomials which satisfy the
Differential Equation
$x \frac{d^2 y}{dx^2} + (\gamma - x) \frac{dy}{dx} - ay = 0$ | } | NEIL M'ARTHUR. |
| On Direct and Inverse Interpolation by
Divided Differences } | } | GLENNY SMEAL. |

Printed in Germany

INDEX TO PROCEEDINGS.

	PAGE
SYLLABUS of Papers read during Session 1919-20	v
PRESENTS TO THE LIBRARY	vii
 GIBSON, Professor.	
A Proof of the Binomial Theorem, with some Applications	6
LIST OF MEMBERS	65
 M'ARTHUR, NEIL.	
Note on the Polynomials which satisfy the Differential Equation	}
$x \frac{d^2y}{dx^2} + (\gamma - x) \frac{dy}{dx} - \alpha y = 0.$	27
 MACROBERT, Dr T. M.	
The Modified Bessel Function $K'_n(z)$	10
 MUIRHEAD, Dr R. F.	
(1) Extension of Frenet's Formulae to a Curve in Flat Space of n Dimensions	20
(2) A Version of Hagen's Proof of the "Law of Error"	24
OFFICE-BEARERS	I
 RICHMOND, HERBERT W., F.R.S.	
A Geometrical Proof of Professor Morley's Extension of Feuerbach's Theorem	2
 SMEAL, GLENNY.	
On Direct and Inverse Interpolation by Divided Differences	34

INDEX TO MATHEMATICAL NOTES.

BRODETSKY, Dr S. On the Formula $\rho = k^2 u^2 (u + u_2)$.	51
MUIRHEAD, Dr R. F. Elementary Proof of the Formula $\frac{V^2}{R}$	52
DAVIS, Dr R. F. Feuerbach's Theorem	53
DAVIS, Dr R. F. Geometrical Note on the Orthopole	54
RUSSELL, ALEX. D. Geometrical Proofs of the Trigonometrical Ratios of 2θ and 3θ .	56
RUSSELL, ALEX. D. Geometrical Proof of $\frac{\tan \frac{1}{2}(B-C)}{\tan \frac{1}{2}(B+C)} = \frac{b-c}{b+c}$	58
BURGESS, A. G. Angles between the Medians and Sides of a Triangle	58
BELL, Professor R. J. T. An Area Proof of the Proposition $AD^2 + DB^2 = 2AC^2 + 2CD^2$	60
STOKES, Dr G. D. C. A Link Slide Rule for the Mechanical Solution of Quadratic Equations	61