

## THIRTY-EIGHTH SESSION, 1919-20.

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*First Meeting, Friday, 14th November 1919.*

1. A New Basis for Graduation . . . Prof. E. T. WHITTAKER.
2. A Geometrical Proof of Morley's Extension of Feuerbach's Theorem . . . H. W. RICHMOND.

*Second Meeting, Friday, 12th December 1919.*

1. A Proof of the Binomial Theorem, with some Applications . . . Prof. GIBSON.
2. Extension of Frenet's Formula to  $n$  Dimensions . . . Dr R. F. MUIRHEAD.
3. Version of Hagen's Proof of the Law of Error . . . Dr R. F. MUIRHEAD.

*Third Meeting, Friday, 16th January 1920.*

1. Note on the Polynomials which satisfy the Differential Equation  $x \frac{d^2y}{dx^2} + (\gamma - x) \frac{dy}{dx} - \alpha y = 0.$  } NEIL MACARTHUR.
2. The Slip Surface and Failure of Metal in Tension . . . Dr E. M. HORSBURGH.
3. Geometrical Note on the Orthopole . . . Dr R. F. DAVIS.

*Fourth Meeting, Friday, 13th February 1920.*

1. On the Modified Bessel Function  $K_n(x)$  Dr T. M. MACROBERT.
2. A Radial Transparent Scale for use with an Abacus . . . Dr E. M. HORSBURGH.
3. Nomograms for Financial Formulae . . . W. A. BARCLAY.

*Fifth Meeting, Friday, 12th March 1920.*

1. The Life of James Stirling, the Jacobite Mathematician, with exhibition of autograph letters by N. Bernouilli, Clairaut, Cramer, Euler, Maclaurin and Stirling . . . . C. TWEEDIE.
2. On the Arrangement of the Signs of the Terms in a certain Double Series given by Arndt , . . . J. MITCHELL.

*Sixth Meeting, Friday, 14th May 1920.*

1. Some Developments in Curve-fitting and the Calculus of Differences . Prof. E. T. WHITTAKER.
2. Robert Hooke on Molecular Interplay . Dr C. G. KNOTT.

*Seventh Meeting, Friday, 11th June 1920.*

1. On Direct and Inverse Interpolation by Divided Differences . . . G. SMEAL.