

## THIRTIETH SESSION, 1911-1912.

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### *First Meeting, Friday, 10th November 1911.*

1. The system of cubic curves circumscribing two triangles and a polar to them - - - - Dr W. P. MILNE.
2. An easy geometrical representation of the Sextic Covariant of a Binary Quartic - - - - Dr W. P. MILNE.
3. On the numerical calculation of Natural Logarithms - - - - Dr J. HUGH MILLER.

### *Second Meeting, Friday, 9th December 1911.*

1. The mechanical solution of an  $n$ -ic, and exhibition of a model for the determination of the roots of a cubic - - - - Prof. W. PEDDIE.
2. Einstein's Principle of Relativity in its kinematical aspect - - - - Dr D. M. Y. SOMMERVILLE.
3. Note on Legendre's and Bertrand's proofs of the parallel-postulate by infinite areas - - - - Dr D. M. Y. SOMMERVILLE.

### *Third Meeting, Friday, 12th January 1912.*

1. An infinite series of triangles and conics with a common pole and polar - - - - J. A. DONALDSON.
2. The condition that the family of surfaces  $\phi(x, y, z, \lambda) = 0$  may be one of an orthogonal triad - - - - F. E. EDWARDES.
3. Graphical trisection of circular arc - - - - R. F. DAVIS.

### *Fourth Meeting, Friday, 9th February 1912.*

1. Graphical Integration - - - - Prof. C. GOLDZIEHER.
2. A Mechanism for solving equations of the  $n^{\text{th}}$  degree - - - - Dr R. F. MUIRHEAD.  
The Geometry of the General Pedal Curve - - - - G. PHILIP.
4. An Extension of the Remainder Theorem - - - - W. GENTLE.

### *Fifth Meeting, Friday, 8th March 1912.*

1. An analytical study of plane rolling mechanisms - - - - Dr G. D. C. STOKES.
2. The Fundamental Formula for the Area of a Triangle in Analytical Geometry - - - - C. TWEEDIE.
3. Proof of a Fundamental Relation between the Bending Moment and Load Curves - - - - E. M. HORSBURGH.
4. An Extension of Clairaut's Differential Equation - - - - H. LEVY.

*Sixth Meeting, Friday, 10th May 1912.*

1. Investigations on Circular Cubics and Bi-circular  
Quartics - - - - - Dr W. P. MILNE.
2. Notice sur les recherches de Maclaurin concernant  
les cubiques circulaires - - - - - Prof. F. G. TEIXEIRA.
3. Note on Linear Differential Equations with constant  
coefficients - - - - - H. T. H. PIAGGIO.

*Secondary Educational Congress, Saturday, 18th May 1912.*

1. The function of graphical work in school teaching - Prof. G. A. GIBSON.

*Seventh Meeting, Friday, 14th June 1912.*

1. A Problem in the Linear Flow of Heat discussed  
from the point of view of the Theory of Integral  
Equations - - - - - Prof. H. S. CARSLAW.
2. Linear Substitutions and their Invariants - - - D. G. TAYLOR.
3. Two General Results in the Differential Calculus - WM. BRASH.