

results obtained involve Fermat's quotient and Bernoulli's numbers.

19. In the *Quarterly Journal*, volume 45 (1914), pages 1-51, Professor J. W. L. Glaisher has calculated the first 27 eulerian numbers from certain recurring formulas and has shown that the method was especially advantageous when "curtate" formulas were employed. Mr. Joffe has verified Professor Glaisher's results and has extended the calculations to five more eulerian numbers by a different method based upon the formula

$$E_n = \sum_{m=0}^n (-1)^{m+n} e_{m,n},$$

where $e_{m,n}$ denotes $(1/2^m)\delta^{2m}0^{2n}$, and the quantities $\delta^{2m}0^{2n}$ are "central differences of zero." The successive terms $e_{m,n}$ are computed by a continuous process from the recurring formula

$$e_{m,n} = m[me_{m,n-1} + (m + \overline{m-1})e_{m-1,n-1}],$$

and the final values of E_n are verified by the formula

$$E_n = \sum_{m=1}^{n-1} (-1)^{m+n+1} [(m+1)(m+2) - 1] e_{m,n-1}.$$

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ON A CONFIGURATION ON CERTAIN SURFACES.

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THE surfaces here under consideration are rational and are generated by conics. They may be represented birationally on the plane in such a way that, to the plane or hyperplane sections of a given surface of the given type, correspond curves of order n having in common an $(n-2)$ -fold point P_0 and Δ simple points $P_1, P_2, \dots, P_\Delta$. We suppose further that $\Delta = 2k$, so that the surface is of even order, that $n > 3$ and that $k > 2$. For simplicity, we suppose that the fundamental points $P_0, P_1, P_2, \dots, P_{2k}$ are in generic position.

The generating conics on the surface are determined by the