

Kummer* has shown that

$$\frac{B_a}{a} \equiv (-1)^{k\mu} \frac{B_{a+k\mu}}{a+k\mu} \pmod{l},$$

where k is an integer and a is not a multiple of $\mu = (l-1)/2$. This gives

$$(-1)^{s\mu} \frac{B_{(sl+1)/2}}{s(l+1)/2} \equiv \frac{B_{(s+1)/2}}{(s+1)/2} \pmod{l},$$

and applying the latter relation to (8) for $a = 1$, we obtain Kummer's result to the effect that the necessary and sufficient condition that h be divisible by l is that one of the Bernoulli numbers B_s , ($s = 1, 2, \dots, \frac{1}{2}(l-3)$) is divisible by l .

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CORRECTIONS AND NOTE TO THE CAMBRIDGE COLLOQUIUM OF SEPTEMBER, 1916.

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1. *Corrections.* On page 35 in equation (9') change γ to α . In all the formulas and equations following on page 35 change γ to β and β to α .

On page 37 in equation (12) change γ to β and β to α .

On page 39 in the second equation there should be an i as a factor of each of the last two terms of the integrand.

2. *Note to Art. 27, the Analogue of Green's Theorem.* The approach to the analogue of Green's theorem is clearer if made in the following way, and bears more relation to the development with which we are familiar in calculus. The meaning of equations (17) to (20) is perhaps not clear, as the equations stand. But the invariant $H_{\Phi_1\Phi_1'}$, defined by

$$(21) \quad (V_1 \times V_2)H_{\Phi_1\Phi_1'} = W_1 \times W_2',$$

which may be rewritten in the new forms

$$\begin{aligned} H_{\Phi_1\Phi_1'} &= (\beta \cdot W_1)(\beta \cdot W_1') + (\alpha \cdot W_1)(\alpha \cdot W_1') \\ &= -(\beta \cdot W_1)(\alpha \cdot W_2') + (\alpha \cdot W_1)(\beta \cdot W_2'), \end{aligned}$$

* L. c., vol. 41, p. 368.