vanish identically; whence not only

$$\xi_0 = R_1 - \frac{q}{2}$$

but also

$$\xi_1 = -R_1 - \frac{q}{2}$$

is a root of $\varphi = 0$.
Whence

$$R_1 = \tfrac{1}{2}(\xi_0 - \xi_1) = \tfrac{1}{2.3^3}\left[(x_0 + \omega^2 x_1 + \omega^2 x_2)^3 - (x_0 + \omega x_1 + \omega^2 x_2)^3 \right]$$

$$= -\frac{\sqrt{-3}}{2.9} \sqrt{\triangle},$$

where $\triangle = (x_0 - x_1)^2 (x_1 - x_2)^2 (x_1 - x_2)^2$ is the discriminant of (1). Thus the *suite* (β) has the character (B).

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ON CERTAIN SUB-GROUPS OF THE GENERAL PROJECTIVE GROUP.

BY PROFESSOR HENRY TABER.

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§ 1

In what follows a linear transformation homogeneous in n variables as

$$\begin{aligned} x_1' &= a_{11} x_1 + a_{12} x_2 + \cdots + a_{1n} x_n, \\ x_2' &= a_{21} x_1 + a_{22} x_2 + \cdots + a_{2n} x_n, \\ &\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots \\ x_n' &= a_{n1} x_1 + a_{n2} x_2 + \cdots + a_{nn} x_n, \end{aligned}$$

will be denoted by the single letter A. If x_1, x_2, etc., are the Cartesian coördinates of a point in n-fold space, the transformation A is a homogeneous strain; and the totality of transformations A constitutes the group of homogeneous strains in n-fold space. If we consider only transformations A of non-zero determinant, we obtain Lie's *general linear homogeneous group*. The group of transformations A of determinant $+1$ is termed by Lie the *special linear homogeneous group*.