$$\begin{split} & \bar{v} = & \frac{CEZ(Lp+R)\sin\phi - LE\sin(\phi - \gamma)}{Z[(Lp+R)(Cp+G)+1]} \\ & = & \frac{LCEZ(p+\alpha)\sin\phi + E\left\{\frac{1}{2}Z(RC-LG)\sin\phi - L\sin(\phi - \gamma)\right\}}{LCZ[(p+\alpha)^2 + \beta^2]} \,, \end{split}$$

where

$$\alpha = \frac{1}{2} \left( \frac{R}{L} + \frac{G}{C} \right), \quad \beta^2 = \frac{RG + 1}{LC} - \alpha^2$$

Hence

$$\begin{split} v = & E \sin \phi \, e^{-\alpha t} \cos \beta t + \frac{E}{\beta L C Z} \, e^{-\alpha t} \\ & \times \{ \frac{1}{2} Z (RC - LG) \sin \phi - L \sin (\phi - \gamma) \} \sin \beta t. \end{split}$$

THE UNIVERSITY OF TASMANIA.

J C. J.

## CORRESPONDENCE.

## WHAT IS STANDARD FORM?

To the Editor of the Mathematical Gazette.

Dear Sir,—Mathematical Association Reports and many text-books say that "a number in standard form is one in which there is one and only one digit to the left of the decimal point" Thus 3·1416 is in standard form.

Nunn in his Algebra says "A number is expressed in standard form when it is written as a decimal with a single digit before the decimal point multiplied by some positive or negative power of 10. Thus the standard form of the numbers 18574 and 0·0005937 are respectively  $1.8574 \times 10^4$  and  $5.937 \times 10^{-4}$ " I have also found one arithmetic book which uses the phrase in the same sense.

Can any of your readers say which meaning of the expression is correct? And what is its history?

The earliest mention of standard form that I have found in the *Mathematical Gazette* is in Vol. IV, p. 141, in the Teaching Committee's Report on the Teaching of Mathematics in Preparatory Schools. There it is used in the sense I have mentioned first, that is, a number with one digit to the left of the decimal point.

Yours truly,

A. W SIDDONS.

<sup>1309.</sup> It is a common custom to refer to the usual complication between one man and two ladies, or one lady and two men, or a lady and a man and a nobleman, or—well, any of those problems—as the triangle. But they are never unqualified triangles. They are always isosceles—never equilateral. So, upon the coming of Nevada Warren, she and Gilbert and Barbara Ross lined up into such a figurative triangle; and of that triangle Barbara formed the hypotenuse.—O. Henry, Schools and Schools. [Per Mr. F. J. Wood.]