Conclusion

With the minor generalization involved in writing the Lorentz transformation in the form (2), we see it is possible to consider values of the velocity parameter in excess of that of light. It appears that if (2) is physically meaningful, objects moving with such values of the velocity parameter are still observed to have velocities less than c, but they will have suffered a simple space reflection. This last mentioned effect is consistent with the usual length contraction for velocities up to c, followed by a space reflection for velocity parameters above c.

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J. G. Gilson

GLEANINGS FAR AND NEAR

When an algebra is deemed to be communicative it means that it communicates the ideas to the next line thus

$$a + b = c$$

in a communicative algebra implies

$$a = c - b.$$

[From a script; strictly anonymous]

CORRESPONDENCE

To the Editor of *The Mathematical Gazette*

Dear Sir,—In his article " A minimal ellipse in an ionospheric problem " (*The Mathematical Gazette,* May 1966, p. 149), Professor Chong remarks that his solution of the problem uses " the theory of conjugate diameters of conics, a topic high on the list of those items in the traditional syllabus which are nowadays singled out for special contempt ". I have no wish to single out conjugate diameters for special or even ordinary contempt, having been brought up on them myself, but I can't resist the remark that if Professor Chong had never heard of conjugate diameters he might have opened his solution with the remark:

" Since the set of ellipses is invariant under affine transformations, and in particular under shears, and since areas are unaltered by shears, we may without loss of generality suppose that the two parallel line segments PP', QQ' have a common right bisector."

Yours faithfully,
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DEAR SIR,—I wonder whether any reader of the *Gazette* would help me with the following question.

A perfectly flexible inextensible string of length L is thrown down at random on a horizontal table. It is assumed that the form of the string is represented by $x = x(s)$, $y = y(s)$, these functions possessing derivatives of all orders for $0 < s < L$. The experiment is repeated many times. What is the average value of the rectilinear distance between the ends of the string?

In spite of the obvious idealisation involved, this looks like a valid mathematical model of a performable experiment, like the famous experiment of the Comte de Buffon (cf. T. H. O'Beirne, *Puzzles and Paradoxes*, Oxford University Press (1965), p. 193). But do we actually have here a well-stated mathematical problem? And, if so, what is the answer?

Yours faithfully,
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DEAR SIR,—Mr. J. P. Marchant's article in the October, 1967 issue of the *Mathematical Gazette* was certainly friendly and frank. I hope I will not be thought unfriendly if I add that its attitude was that of a 20th Century Luddite.

I too have been deeply involved in computer education for the past five years but, unlike Mr. Marchant, I am greatly excited by the prospects of computer education. I hope that, in this country, it develops to a stage where we can be confident that we are giving our students an education likely to enable each of them to make their maximum contribution to society, not only in this decade but in the last three decades of this century and beyond.

I agree with Mr. Marchant's aims " to instil a high standard of morality and sense of duty ", . . . " to teach growing people to think clearly and to be able to communicate clearly ", these are thoroughly laudable ideals shared by many enthusiasts *for* computer education and I fail to see how computer education comes to be linked in Mr. Marchant's mind with a lack of morality and sense of duty.

" Quality of work " and " tenacity of labour " are two more widely accepted ideals which Mr. Marchant mentions. What could be of a higher quality than a well-written, well-conceived, skilfully programmed,

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